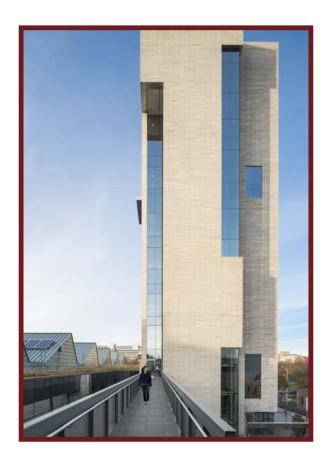
# THE UNIVERSITY OF CHICAGO



GRADUATE PROGRAMS IN THE DIVISIONS

ANNOUNCEMENTS 2013-2014

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### **GRADUATE**

In keeping with its long-standing traditions and policies, the University of Chicago considers students, employees and applicants for admission or employment, and those seeking access to programs on the basis of individual merit. The University, therefore, does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender identity, national or ethnic origin, age, disability, veteran status, or other protected classes under the law.

The University official responsible for coordinating the University's adherence to its non-discrimination policy and the related laws and regulations is Aneesah Ali, Associate Provost, Affirmative Action Officer, 504 Coordinator and Title IX Coordinator. She can be reached via email at aali@uchicago.edu and by telephone at 773.702.5671.

The Title IX Coordinator for Students is Belinda Cortez Vazquez, Associate Dean of Students in the University for Student Affairs. She can be reached via email at belinda@uchicago.edu and by telephone at 773.702.9710.

Related federal, state and local laws and regulations include Section 504 of the Rehabilitation Act of 1973, as amended, the Americans with Disabilities Act, and Title IX of the Education Amendments of 1972.

The content of these Announcements is accurate as of August 1, 2013. It is subject to change.



## THE UNIVERSITY OF CHICAGO

Andrew M. Alper, Chairman of the Board of Trustees Robert J. Zimmer, President of the University Thomas F. Rosenbaum, Provost

Candidates for admission to graduate programs at the University of Chicago should address their inquiries, including requests for application materials, to the Dean of Students of the relevant graduate division or school to which application is being made. All of the information in this volume, as well as in the *Announcements* of each of the professional schools, is available online at http://catalogs.uchicago.edu. These documents are updated periodically. You will find admissions applications and more detailed information about a program that interests you on divisional websites. The statements contained in these *Announcements* are subject to change without notice.

Division of the Biological Sciences 924 East 57th Street Chicago, IL 60637 (773) 834 2105

Email: biosci-grad-affairs@bsd.uchicago.edu http://gradprogram.bsd.uchicago.edu

Division of the Physical Sciences 5747 Ellis Avenue

Chicago, IL 60637 (773) 702-8789

Email: individual departments

http://physical-sciences.uchicago.edu

Division of the Humanities 1115 East 58th Street

Chicago, IL 60637

(773) 702-8512

http://humanities.uchicago.edu

Division of the Social Sciences

1130 East 59th Street

Chicago, IL 60637

(773) 702-8414

Email: ssdadmissions@uchicago.edu http://socialsciences.uchicago.edu

The University of Chicago Booth School of Business

5807 S. Woodlawn Ave. Chicago, IL 60637

(773) 702-7743

Email: admissions@chicagobooth.edu

www.chicagobooth.edu (http://www.chicagobooth.edu)

Divinity School

1025-35 East 58th Street

Chicago, IL 60637

(773) 702-8217

Email: tdowens@uchicago.edu http://divinity.uchicago.edu

Law School

1111 East 60th Street

Chicago, IL 60637

(773) 702-9484

Email: admissions@law.uchicago.edu

http://www.law.uchicago.edu

Irving B. Harris Graduate School of Public Policy Studies

1155 East 60th Street

Chicago, IL 60637

(773) 702-8401

http://www.HarrisSchool.uchicago.edu

School of Social Service Administration

969 East 60th Street

Chicago, IL 60637

(773) 702-1250

Email: ssa.dos@uchicago.edu

http://www.ssa.uchicago.edu

Graham School of Continuing Liberal and Professional Studies

1427 E. 60th Street, Press Building, Suite 2

Chicago, IL 60637

(773) 702-1722

Email: gsalinfo@uchicago.edu

Institute for Molecular Engineering

Jones Laboratory 222

5747 South Ellis Avenue

Chicago, IL 60637

(773) 834-2023

ime@uchicago.edu

http://ime.uchicago.edu/

The University of Chicago central switchboard: (773) 702-1234



### ACADEMIC CALENDAR

2013 Summer Q	uarter
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Description	Date(s)
Quarter begins	Monday, June 24
Independence Day	Thursday, July 4
Convocation	Friday, August 30
Quarter Ends	Saturday, August 31
Medicine Ends	Friday, September 6
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#### 2013 Autumn Quarter

Description	Date(s)
Registration for the Divisions	Monday, September 23
Quarter Begins	Monday, September 30
Thanksgiving	Thursday-Friday, November 28-29
Reading Period	Thursday-Friday, December 5-6
Convocation	Friday, December 13
Quarter Ends	Saturday, December 14

#### 2014 Winter Quarter

Description	Date(s)
Quarter Begins	Monday, January 6
Martin Luther King, Jr. Day	Monday, January 20
College Break	Friday, February 14
Reading Period	Thursday-Friday, March 13-14
Convocation	Friday, March 21
Quarter Ends	Saturday, March 22

#### 2014 Spring Quarter

Description	Date(s)
Quarter Begins	Monday, March 31
Memorial Day	Monday, May 26
Reading Period	Thursday-Friday, June 5-6
Convocation	Saturday, June 14
Quarter Ends	Saturday, June 14

All dates are subject to change with no notice.

Up to date academic calendars can be found at http://academic-calendar.uchicago.edu/.



### GENERAL INFORMATION

Announcements: Graduate Programs in the Divisions provides an overview of all graduate programs at the University of Chicago in the Divisions of the Biological Sciences, the Humanities, the Physical Sciences, the Social Sciences, and the Institute for Molecular Engineering. Professional schools in the University are closely integrated into the wider University; their programs are briefly described here. An individual issue of the *Announcements* is also available from each professional school which describes its programs and requirements in detail.

This volume is organized in a way that reflects the organization and functioning of the University. Each department or degree granting committee in the divisions of the University conducts its own admissions and aid competition, and sets its own degree requirements within a framework that is set by the University and by each division. However, divisions and departments engage in a substantial number of cooperative efforts, as evidenced by the large number of interdepartmental and interdivisional programs, committees, centers, and research groups in the University. Therefore, this volume contains a section for each division, and a separate section for interdivisional programs, centers, committees, and other organizations in which students may participate and, in some cases, earn a degree. The introductory section, which you are now reading, contains information about the University that is relevant to all students and applicants. A final section contains information for those interested in one of the professional schools.

Readers of these *Announcements* are advised that the policies and degree requirements of academic units that are set forth herein may change at any time without prior notice, or may represent a summary of more detailed policies and requirements. Students and applicants who wish the most up to date information regarding courses and degree requirements should review the divison or department website or contact the department or the dean of students in the relevant division. The provisions of these *Announcements* are for informational purposes only and are not intended to create a contract or agreement between the University and any applicant or student.

#### HISTORY AND PURPOSE

The University of Chicago is a private, nondenominational, coeducational institution of higher learning and research. It is located in the community of Hyde Park-South Kenwood, a culturally rich and ethnically diverse neighborhood seven miles south of downtown Chicago. Hyde Park-South Kenwood encompass one and one quarter square miles of commercial and residential districts that extend from 47th Street on the north to 61st Street on the south and from Cottage Grove Avenue eastward to the shoreline of Lake Michigan. The neighborhood is a stimulating blend of the urban and small town.

The University of Chicago includes the undergraduate College; four graduate Divisions (of the Biological Sciences, the Humanities, the Physical Sciences, and the Social Sciences); six graduate professional schools (The University of Chicago

Booth School of Business, the Divinity School, the Law School, the Pritzker School of Medicine, the Irving B. Harris Graduate School of Public Policy Studies, and the School of Social Service Administration); the Institute for Molecular Engineering, the libraries, laboratories, museums, clinics, and institutes; the William B. and Catherine V. Graham School of Continuing Liberal and Professional Studies; and the University of Chicago Press.

The University was founded by John D. Rockefeller. William Rainey Harper was its first president. Classes began on October 1, 1892, with an enrollment of 594 students and a faculty of 103, including eight former college presidents. In 1930 the undergraduate College and the graduate divisions were created by President Robert Maynard Hutchins to foster interdisciplinary study and encourage interdepartmental cooperation. Such cross fertilization continues to characterize the University.

Since its founding, the University has earned a reputation for recruiting a faculty committed to scholarly distinction and intellectual innovation. The faculty is represented in more than seventy honorary and professional societies, including the National Academy of Sciences, the American Academy of Arts and Sciences, the American Philosophical Society, and the National Academy of Education. Eighty-seven members of the faculty, former students, or individuals who did research at the University have been named Nobel laureates, and seven are currently members of the faculty. Notable is the faculty's tradition of developing cross disciplinary fields of study, such as Law and Economics, Conceptual and Historical Studies of Science, Ecology and Evolution, and the Institute for Mind and Biology. A leader in higher education, the University of Chicago has had a major impact on the nation's colleges and universities.

The graduate programs in the University aim to send out graduates who have begun to develop mastery of the content and methods of their chosen field of study and who are equipped to continue to learn and to produce new knowledge. To that end, the University of Chicago offers an unusually free environment for graduate study, one that encourages both faculty and young scholars and researchers to develop their interests and talents by working with colleagues throughout the University.

In addition to its Ph.D. programs and the master's degrees offered through them, the University offers a number of special degree programs for students who have completed an A.B. These free standing master's degree programs, which may be departmental and multidisciplinary, or offered in conjunction with a master's degree in a professional school, are carefully tailored for students whose goal is a master's degree. Some students who successfully complete these programs subsequently decide to apply to doctoral programs at the University or elsewhere. However, these special degree programs are conceived as self contained. These programs are listed below:

#### Interdisciplinary programs

- East Asian Studies (as M.B.A./A.M. only)
- East European and Russian/Eurasian Studies (as M.B.A./A.M. only)

- Latin American and Caribbean Studies
- Middle Eastern Studies
- South Asian Studies (as M.B.A./A.M. only)

Division of the Biological Sciences

· Health Studies

Division of the Humanities

- Master of Arts Program in the Humanities
- Visual Arts (M.F.A.)

Division of the Physical Sciences

- Master of Science Program in Computer Science
- Master of Science Program in Financial Mathematics
- Master of Science Program in the Physical Sciences

Division of the Social Sciences

- International Relations
- Master of Arts Program in the Social Sciences

## APPLICATION TO THE PROGRAMS IN THE DIVISIONS AND THE INSTITUTE FOR MOLECULAR ENGINEERING

Applicants for admission to graduate programs in the divisions at the University of Chicago should address their inquiries to the dean of students of the graduate division or to the program to which application is being made. Applications are submitted electronically; applicants should consult the appropriate divisional or program website for information and instructions.

#### DIVISION OF THE BIOLOGICAL SCIENCES

Associate Dean BSD Office of Graduate Affairs and Postdoctoral Affairs 924 East 57th Street, Suite 104 Chicago, IL 60637 5416 (773) 834-2105 BSD.OGPA@lists.uchicago.edu

#### DIVISION OF THE HUMANITIES

Dean of Students
Division of the Humanities
Walker Museum 111
1115 East 58th Street
Chicago, IL 60637
(773) 702-1552
humanitiesadmissions@uchicago.edu
http://humanities.uchicago.edu

#### DIVISION OF THE PHYSICAL SCIENCES

Applicants should consult the website of the program to which they intend to apply for up to date admission materials. http://physical-sciences.uchicago.edu

#### DIVISION OF THE SOCIAL SCIENCES

Dean of Students Division of the Social Sciences Foster Hall 105 1130 East 59th Street Chicago, IL 60637 (773) 702-8415 admissions@ssd.uchicago.edu http://socialsciences.uchicago.edu

#### INSTITUTE FOR MOLECULAR ENGINEERING

Jones Laboratory 222 5747 South Ellis Avenue Chicago, IL 60637 (773) 834-2023 ime@uchicago.edu http://ime.uchicago.edu/

An applicant who holds a degree from an accredited institution is considered for admission on the basis of (1) an undergraduate record, (2) a well organized plan for graduate study, (3) Graduate Record Examination (GRE) and English proficiency scores, where required, and (4) recommendations from three college faculty members acquainted with the character, ability, potential, qualifications, and motivation of the applicant. Persons who have been away from school for several years may submit recommendations from employers, professional associates, or supervisors.

Certain departments of the University require additional credentials; details concerning these additional credentials are available with the application form, or will be sent to candidates for admission after they have filed their applications.

Transcripts of all academic work and letters of recommendation should be submitted with the application. More detailed instructions are included with each division's application. Every applicant is asked to study the general statement of the division he or she plans to enter and the specific requirements of the proposed field of graduate study.

#### International Students

Students from abroad must submit, in addition to the usual credentials, proof of proficiency in English and documentation of all sources of financial support to cover their first year of expenses at the University. Only those students from abroad who hold the equivalent of a U.S. bachelor's degree and whose academic record is excellent will be considered for admission.

#### APPLICATION DEADLINES

Applications for admission and for aid must be submitted by the appropriate deadline. Application deadlines can be found on the online applications and may be as early as December 1 for the following autumn. Incomplete applications will be evaluated on the basis of materials received at the time of the regular review process.

#### PART TIME STUDY

Part time study is more feasible in some fields than in others. The divisional dean of students can answer questions about opportunities for part time study in particular departments. Student loans are available to students enrolled at least half time. Applicants for part time study are generally not eligible for scholarship assistance since priority in assigning limited University aid funds must necessarily go to full time students.

Applicants who wish to begin their studies on a part time basis should so indicate on their applications.

#### DECISIONS

Most admission and aid decisions for the autumn quarter are sent by mid-March. Students have until **April 15** to accept or decline.

In agreement with the Resolution of the Council of Graduate Schools in the United States, a student who agrees to accept a scholarship, fellowship, traineeship, or graduate assistantship at the University of Chicago or at any of these schools prior to April 15 and subsequently desires to change plans must resign the financial aid offer and/or acceptance of admission at any time through April 15 in order to accept another scholarship, fellowship, traineeship, or graduate assistantship, regardless of any understanding reached before then. This protects the student's right to select the offer that is most attractive.

#### STUDENTS WITH DISABILITIES

As soon as possible after having been admitted, students should contact their divisional dean of students.

#### CONDITIONS OF ACCEPTANCE

Acceptance of a scholarship or fellowship is conditional on the student's agreement to devote full time to graduate study toward an advanced degree at the University of Chicago. In cases of students holding larger awards, special permission for remunerative work must be secured in advance.

#### APPLICATION TO PROFESSIONAL SCHOOLS

Students interested in the University's professional schools (The University of Chicago Booth School of Business, the Divinity School, the Law School, the Pritzker School of Medicine, the Harris School of Public Policy Studies, or the School of Social Service Administration) should contact the admissions office of each school. Students interested in general courses, courses as a student-at-large, returning scholar, the Master of Science in Threat and Response Management, or the Master of

Arts in Teaching program should contact the William B. and Catherine V. Graham School of Continuing Liberal and Professional Studies.

#### BEING A STUDENT AT THE UNIVERSITY OF CHICAGO

From healthcare services to cultural programming, The University of Chicago is dedicated to supporting and enriching the life of its graduate students. To that end, there are many offices and programs that exist to create a healthy, safe, and productive environment for students both inside and outside the classroom. You can find a list of resources available to graduate students at http://grad.uchicago.edu/

Chicago is a vibrant and exciting city that you will want to explore. As a world class city, Chicago also presents all of the typical challenges of a complex modern urban society. While the University takes measures to ensure a safe campus environment, there are also many things you can do to ensure your own safety. The University's campus safety report, Common Sense, is designed to help equip you to navigate the city successfully and offers information about the University offices that provide services related to security and safety. The report is available online at http://commonsense.uchicago.edu/. Hard copies of Common Sense are available upon request from the Office of Campus and Student Life, 5801 S. Ellis Ave., Chicago, IL 60637, (773 702-7770).

As a member of The University of Chicago community, there are University policies and regulations you are responsible for knowing. These policies protect your rights and outline your responsibilities as students. For instance, the Graduate Student Parents Policy grants academic accommodations to graduate students who are also new parents, and the Residence System for Students in PhD programs defines the status of doctoral students as they progress through their studies. A complete statement of policies and regulations can be found at http://studentmanual.uchicago.edu/



### Interdivisional Programs

The University of Chicago has a distinctive and distinguished tradition of interdisciplinary research and teaching. Faculty and students with interests that span departmental lines are readily able to find colleagues throughout the University. The many interdivisional programs that flourish at the University vary widely in purpose and organization. Some are formal, degree granting committees, some are area studies centers, some are comparatively informal groupings of faculty and advanced students who share an interest in some method, approach, or subject area.

## THE COUNCIL ON ADVANCED STUDIES IN THE HUMANITIES, SOCIAL SCIENCES, AND THE DIVINITY SCHOOL

Chair

Deborah Nelson, Deputy Provost for Graduate Education

Members

- · Daniel Arnold
- · Shadi Bartsch-Zimmer
- Robert Bird
- Mark Philip Bradley
- Andreas Glaeser
- John Kelly
- Katherine Kinzler
- Ionathan Lear
- Jill Mateo
- John McCormick
- Eric Santner
- Iudith Zeitlin

Ex Officio Members

- Margaret M. Mitchell, Dean of the Divinity School
- Martha T. Roth, Dean of the Division of Humanities
- Mario L. Small, Dean of the Division of Social Sciences Administrative Director

Julianne Gorny

THE COUNCIL ON ADVANCED STUDIES

Judd Hall 443/444

5835 South Kimbark Avenue

Chicago, IL 60637

(773) 702-8540 cas@uchicago.edu http://cas.uchicago.edu

## Graduate Workshops in the Humanities, Social Sciences, and Divinity, 2013-2014

Graduate workshops in the humanities, social sciences, and divinity for 2013-2014 are described below. Most of these are ongoing, although the focus may change from year to year. Because new workshops are established on an annual basis, please see our website (http://cas.uchicago.edu) for current information and links to workshop websites. Generally meetings consist of discussions of papers by advanced graduate students, University of Chicago faculty, or guest speakers from other institutions, although this varies according to each workshop's objective and focus.

#### AFRICAN STUDIES

The African Studies Workshop (ASW) is an interdisciplinary group made up of students and faculty researching the peoples of Africa and its diasporas, past and present. One of the workshop's primary goals is to elucidate Africa's dynamic relationship to a wider world, and to chart the effects of these processes in various spheres of African life. The Workshop meets every other week in Wilder House to discuss pre-circulated papers presented by students, faculty, and guests. Information on the workshop and its activities is available at https://africanstudies.sites.uchicago.edu/page/african-studies-workshop

#### AMERICAN LITERATURES & CULTURE

The American Literatures & Cultures Workshop provides a forum for interdisciplinary engagement with American literature, culture, and history. We welcome papers that attend to a diverse array of historical, formal, disciplinary approaches in the study of American literature and culture. This workshop seeks to enable graduate students to participate more robustly in conversations about the function of American cultural objects in a changing intellectual world by sharing works in progress with peers as well as faculty members.

#### American Politics

The American Politics Workshop offers graduate students who study American politics the opportunity to present and critique each other's work, as well as to engage research from top-flight scholars in the discipline. We incorporate a wide breadth of perspectives. The research presented reflects the richness of the American Politics subfield. Scholars from the University of Chicago and other institutions are invited

#### Ancient Greek and Roman Philosophy

The Ancient Greek and Roman Philosophy Workshop promotes research and inquiry into philosophical authors in the thousand-year-long tradition stretching

from the pre-Socratics through Plato, Aristotle, and the Hellenistic schools up to Plotinus and Augustine in two ways: [1] the regular presentation of work in progress by graduate students, supplemented occasionally by that of distinguished visiting scholars, and [2] the translation and analysis of a single text throughout the year, led by graduate students. In 2013-14 our theme will be neo-Platonic psychology and philosophy of mind and our corresponding text Plotinus, Ennead IV.3, a challenging treatise on 'problems of the soul'.

#### ANCIENT SOCIETIES

The Ancient Societies Workshop is Chicago's principal meeting ground for scholars across a range of disciplines undertaking historical inquiry into the ancient world. 2012-2013 inaugurated a two-year investigation of the theme "Texts and Archaeology." Our aims are to explore the relationship between documentary texts and archaeological excavation as sources of evidence; to study ancient documents in their contexts of use and production, and to evaluate the history of their use, reuse, reception and, often enough, disposal; and to promote a conversation among philologists, historians, archaeologists, anthropologists and art historians regarding historical and comparative contextualization in the evaluation of these materials.

#### Animal Studies

The Animal Studies Workshop is an interdisciplinary group of graduate students and faculty who engage with animals, representatives of animals, and humananimal relationships. The workshop serves to 1) explore the diversity of approaches and methodologies within the field of Animal Studies, 2) connect Animal Studies scholars across disciplines, 3) investigate the meaning and role of Animal Studies as an area of study within academia, and 4) provoke new lines of inquiry, inspire collaborations, and support individual work. For these purposes, the workshop hosts presentations of participants' projects, invites pre-eminent Animal Studies scholars, engages with relevant readings, and encourages lively discussion.

#### ART AND POLITICS OF EAST ASIA

The Art and Politics of East Asia workshop provides a forum for students and faculty to meet and discuss the relationship between aesthetics and political economy in textual, visual, and performance media in East Asia. The major research concern of the workshop is to consider the politics out of which artistic works emerge, with an additional focus on the experience of modernity in East Asia societies.

#### CENTRAL EUROPE

This workshop focuses on multidisciplinary approaches to the Central European region, broadly considered. The forum offers the space for discussion of Central Europe, from its origins to the present, for students from all disciplines, from history to literature, from religious studies to linguistics. Presenters come from the University faculty and graduate students as well as invited scholars working on related research projects. The workshop is a place to discuss current research and

is the focal point of a larger interdisciplinary community of scholars and Chicago graduate students interested in Central Europe.

#### CITY. SOCIETY & SPACE

The social organization of urban environments has always held a prominent place in the social sciences and at the University of Chicago in particular. This workshop carries on that tradition, providing an interdisciplinary forum for faculty and graduate students to present current research. Participants contribute to the development of new understandings of the social structures and processes within a city. This workshop hosts a lively and interactive series of presentations covering such topics as political economy, culture, social organization, globalization, crime, and urban history.

#### COGNITION

Broadly speaking, this workshop will explore fundamental topics in cognitive psychology such as attention, memory, learning, problem solving, and language, and how cutting-edge research in these areas can be used to enhance performance in a variety of contexts. Understanding how to optimize cognitive ability can have a considerable impact on performance throughout the lifespan, ranging from the development of the most effective teaching and communication practices in classroom settings to the learning and application of compensatory memory and reasoning strategies late in life.

#### COMPARATIVE BEHAVIORAL BIOLOGY

Jointly sponsored by the Institute for Mind and Biology and the Department of Comparative Human Development, this workshop brings together individuals broadly interested in how biology and environment influence social behaviors and how the environment in turn influences genetic change. Presenters conduct research on how developmental, physiological, and immunological mechanisms influence organismal behavior, and how evolutionary processes promote these mechanisms. Our regular participants study human and nonhuman animals, researching paternal behaviors, mate choice, immunology and endocrinology, kin selection, and cognition, among other topics. Graduate students interested in any area of the biological and social aspects of behavior are encouraged to attend this open forum.

#### COMPARATIVE POLITICS

Comparative politics is a broad field. The common thread running through the research presented at our workshop is the search for broad theoretical propositions and fresh empirical insights through the comparative study of politics. The topics of the workshop include (but are not limited to) violence, states, political parties, ethnicity, nationalism, economic development, democracy, and ideology. The workshop is interested in a dialogue among different disciplines, areas, fields, and methodological traditions.

#### COMPOSER'S

Composer's Workshop (CW) is intended as a space in which issues related to music composition enter in dialogue with other disciplines. By bringing in different actors of the artistic community (not only of the University but also the city) the idea is to expand the scope of what is understood by music composition through the interaction with a multiplicity of views.

#### COMPUTATIONAL SOCIAL SCIENCES

An unprecedented volume of data on human behavior is now being offered by governments, corporations, educational institutions, and not-for-profit organizations. Along with this scale of data, new methods of data mining, estimation, modeling, and information processing offer unprecedented possibilities for social science inquiry. However, these methods have only begun to be adopted by scholars asking sociological questions, and these early workers are scattered throughout the university. The primary aim of this workshop, then, is to draw together scholars from both computational and sociological backgrounds into a lively, learning community exploring these new opportunities.

#### CONTEMPORARY EUROPEAN PHILOSOPHY

The Contemporary European Philosophy Workshop is an interdisciplinary forum that seeks to promote sustained advanced research in the field of European philosophy at the University of Chicago and to foster a local community of scholars from across the humanities and social sciences. It welcomes students, faculty, and members of the wider philosophy community to present and discuss their latest work.

#### EARLY CHRISTIAN STUDIES

The purpose of our workshop is to provide a venue for students and scholars of the New Testament, Greco-Roman religions and literatures, and the early history of Christianity to present their creative work on primary texts and other evidence for the early Christian movement and the world in which it grew. We seek to bring scholars and students from diverse disciplines together around a range of topics in the first four centuries of Christian history for interdisciplinary conversation that enhances research among themselves and with distinguished visiting speakers.

#### Early Modern

This interdisciplinary workshop focuses on every aspect of the early modern experience, circa 1350-1800. It encompasses the entirety of the Mediterranean and European worlds as well as their rivals and colonial possessions. While the workshop's approach is historical, we actively encourage participants who work on any aspect of the areas and period covered. Most sessions discuss precirculated papers presented by graduate students, faculty, or invited visitors. The Early Modern Workshop is a forum for the Chicago community to meet and help one another in ongoing research about political, cultural, economic, and legal topics broadly situated across four centuries of world history, from colonial America to Europe to Southeast Asia.

#### EARLY MODERN PHILOSOPHY

The Early Modern Philosophy Workshop provides a forum for students whose research interests include developments in philosophy from the 16th through the 18th centuries. This includes, but is not limited, to the following: (1) The study of prominent figures and movements of the period including Descartes, Locke, Hume, Hobbes, Spinoza, Leibniz, Rousseau, (2) Developments in theology, political and moral theory, the natural sciences, logic and mathematics in this period, and (3) Approaches in contemporary theoretical and practical philosophy that take an Early Modern figure or conception as their point of departure.

#### EAST ASIA: POLITICS, SOCIETY & ECONOMY

This workshop focuses on current social science research on East Asia, particularly the People's Republic of China, Korea, Taiwan, and Japan. The scope of the workshop is truly interdisciplinary, as we attract students and faculty from political science, sociology, economics, anthropology, history, international studies and various other areas. The workshop features presentations by university faculty members, graduate students, and guest speakers from other institutions working on East Asia. Graduate students are especially encouraged to present their thesis and dissertation research.

#### EAST ASIA: TRANSREGIONAL HISTORIES

This workshop invites students, faculty and scholars from other academic communities to present creative and original work that speaks across the national lines of East Asia as well as the disciplinary lines of the academic community. Joint presentations among participants that incorporate multidisciplinary and/or transregional historical perspectives are especially encouraged.

While recognizing the continuing importance of the nation state in historical understanding, we believe that it is just as important to give exposure to themes of a transnational and regional or global nature that have been obscured by the national paradigm. Such approaches can prove particularly fruitful when undertaken at a level of understanding beyond traditional departmental and specialty boundaries. The workshop invites advanced students, faculty, and outside speakers and visitors from the humanities and social sciences to present papers on the topic of East Asia and its multiple and contending historical definitions.

#### **EDUCATION**

The Workshop on Education is an interdisciplinary workshop supporting the advancement of education-related research and theory among members of the university community in two types of sessions: 1) Methodology and 2) New Findings in Education. Methodology sessions enable presenters with work in progress to seek advice from workshop participants on research design and analysis approaches. New Findings in Education sessions provide an outlet for presenters to share ongoing research and completed papers with workshop participants.

#### **EIGHTEENTH & NINETEENTH CENTURY CULTURES**

The Eighteenth- and Nineteenth-Century Cultures Workshop is an interdisciplinary forum for the presentation and discussion of student and faculty work-in-progress. During the years 1660-1900, cultural production achieved unprecedented heterogeneity throughout Britain, its colonial possessions, and Western Europe. The goal of the workshop is to interrogate the tension between this diversified production and the unifying narrative of modernity often imposed on this 240-year span.

#### ETHNOISE! ETHNOMUSICOLOGY

The workshop contributes to a growing interdisciplinary discourse on music and its cultural context, establishing an interchange among disciplines in the humanities and social sciences. This forum capitalizes upon the ongoing work of graduate students in the University and invites innovative scholars to Chicago to explore the challenges faced by music ethnographers. We welcome submissions from graduate students in all disciplines and encourage University-wide faculty participation.

#### GENDER & SEXUALITY STUDIES

This workshop provides an interdisciplinary forum for the development of critical perspectives on gender and sexuality. The workshop's primary purpose is to promote studies of the ways in which gender and sexuality shape human experiences and are embedded in other social practices. The workshop serves as a forum for discussing both graduate student papers and unpublished work from scholars in the field. Graduate student presentations may focus on any area of gender and sexuality studies. The workshop is thematically organized by quarter to provide topical coherence with a faculty curator who determines the topic that unites the presented works

#### GERMAN PHILOSOPHY

The German Philosophy Workshop operates with a very broad understanding of the concept of Germany Philosophy, which encompasses the following six dimensions of the concept: (1) German Idealism and its precursors, (2) Nineteenth-century Germany philosophy, (3) Twentieth century German philosophy, (4) the elucidation and development within the Anglophone tradition of central concepts, methods, and concerns from the German tradition, (5) the German tradition in analytic philosophy, and (6) work by contemporary German philosophers on topics in all areas of philosophy. Sessions are divided among discussion of graduate student work in progress, translation and discussion of a selected text, and talks by outside speakers.

#### HEBREW BIBLE

The Hebrew Bible Workshop engages questions in and around the Hebrew Bible, its historical and cultural context, and its ongoing interpretation. Student, faculty, and visiting scholar presentations encompass a broad range of topics, disciplines, and methodologies, such as art, archeology, hermeneutics, literature, philosophy, history, philology, and linguistics. With this multitude of perspectives, the workshop aims to stimulate dialogue within the classically defined areas and interests of the

field as well as to encourage new and exciting research outside of them. Workshops meet twice monthly.

#### HISTORY, PHILOSOPHY & SOCIOLOGY OF SCIENCE

The Workshop on the History, Philosophy, and Sociology of Science (http://chss.uchicago.edu/events.html) is a forum devoted to interdisciplinary approaches to the sciences. Its meetings provide a chance to encounter the latest work in science studies, presented by outside speakers, UC faculty, and graduate students. Topics range widely: in recent years the workshop has hosted discussions of subjects as diverse as Aristotelian logic, science and economics, the information practices of modern biology, William James's philosophy, bioethics, and the sociology of industrial-academic collaboration. Meetings take place every Friday in the teaching quarters, at noon and 4pm on alternate weeks. Noon meetings tend to focus more on the human sciences; for these papers are generally pre-circulated.

#### **HUMAN RIGHTS: RIGHTS AND DUTIES**

The Human Rights Program proposes a three year workshop on "Rights and Duties," to be directed by three faculty, John Kelly (Anthropology), Daniel Brudney (Philosophy) and Jennifer Pitts (Political Science). The "Rights and Duties" Workshop will encourage graduate student participation in an ongoing faculty project of the Human Rights Program, to contribute to scholarship on Human Rights with clearer attention to the strange divergence between political theory and political realities in the actual history of performed "rights" and "duties." "Human Rights and Duties" is quintessentially an interdisciplinary topic. Therefore, a multimodal inquiry into rights and duties in theory and reality is intended not only to help visiting scholars and our own faculty and graduate students to develop their own ideas and research projects, but also to reach some definite conclusions about the situation of human rights discourse and human rights projects in the contemporary world. The three year workshop is one component of new Human Rights thematic initiatives (funded by our grant from Richard and Ann Pozen) which will also include support for doctoral student and faculty research symposia and conferences where appropriate.

### Interdisciplinary Approaches to Modern France and the Francophone World

This workshop provides a forum for faculty and students from different departments in the social sciences and the humanities who share a common interest in France from the mid-seventeenth century to the present. Bringing together different disciplinary perspectives and research horizons, it encourages participants to enrich the intellectual and methodological range of their own work. Topics will reflect the diversity of the group and include representatives from the fields of history, anthropology, literature, art history, sociology, and political science. Participants from all disciplines are welcome.

#### **INTERDISCIPLINARY ARCHAEOLOGY**

This year, the Interdisciplinary Archaeology Workshop (IAW) will focus on materiality. Nearly every human behavior involves material artifacts. These

ubiquitous items act as media through which we navigate our lives in diverse and complex ways. Artifacts are integral to archaeology, and the study of their impact on the human social experience is a major goal of the discipline. Consequently, archaeologists have considerable insights to offer. These insights provide fertile ground for discussion with appeal to not only archaeologists, but to any field that engages with the study of how material objects are a part of human life.

#### INTERDISCIPLINARY WORKSHOP IN PARIS

The Interdisciplinary Workshop in Paris is a special workshop catering to the needs of students who find themselves in France (or nearby) during the school year. Unified by the circumstance of being in Paris together as well as a general interest in France and French culture, the workshop is probably one of the most catholic at the university, featuring presentations in just the past year on anthropology, archaeology, economics, history, literature, music, and physics. In addition to biweekly meetings to hear speakers or discuss papers, the workshop serves as a social nerve center for students researching in France.

#### International Politics, Economy & Society - PIPES

As a workshop on international politics, economics and security, PIPES sessions address a broad range of theoretical and empirical issues and reflect widely varying methodological approaches and normative commitments. Faculty and student coordinators and participants view diversity in scholars and scholarship as a priority. We encourage projects that transcend conventional disciplinary and subdisciplinary boundaries. In addition to contributing to the International Relations and Comparative Politics scholarship, our participants draw from critical theory, international finance, sociology, international political psychology, African studies, Middle-Eastern studies, communications, and history to construct their projects.

#### INTERNATIONAL SECURITY POLICY - PISP

The Program on International Security Policy (PISP) is a widely attended and intellectually vigorous workshop at the University. PISP's activities revolve around a simple and important goal: to serve as a major center for scholarship and graduate student education for deep understanding of mainstream issues of international security. The workshop provides a forum for faculty and students to present original unpublished research papers, commonly a draft of a journal article or dissertation or book chapter. Topics include all aspects of the causes of war and peace, American national security policy, and international security affairs.

#### ISLAMIC STUDIES

The Islamic Studies workshop is a forum for students from multiple disciplines. We examine a variety of phenomena (political, social, philosophical, artistic, scientific, economic, etc.) through the lens of Islamic traditions. The intersection of all the topics explored in the workshop is Islam in the most general sense; it will not be geographically or temporally bound. However, we hope that the Islamic Studies workshop will provide students a much-needed space in which to explore how

Islam informs singular historical events and shapes societies as the primary object of inquiry.

#### JEWISH STUDIES

The Jewish Studies Workshop is the primary meeting-place for one of the most vibrant and interdisciplinary Jewish Studies communities in the world. Bringing together faculty and students from across various disciplines, the Jewish Studies Workshop seeks to provide a forum for vibrant discourse and critical reflection on work and topics that may range across the field of Judaica. From Jewish language, literature, and music to religion and philosophy, this workshop looks to engage students and faculty interested in Jewish studies while stretching them to think beyond the strictures that currently typify their sub-disciplines.

#### KNOWLEDGE/VALUE

This interdisciplinary workshop is concerned with scholarship located at sites in which knowledge, value, and the articulation between these concepts are at stake in public life. In light of recent decades of techno-scientific change and its impact upon politics, economics, and culture at multiple scales, we believe that knowledge, value, and their relationship require fresh theorization. This workshop combines a strong interest in science studies with scholarship that brings those concerns beyond their traditional spaces of inquiry. Themes for 2013-2014 include: discourses of crisis and promise; relationships between institutions, markets, and states; property and privatization; and political identity.

#### LANGUAGE, COGNITION & COMPUTATION

The Language, Cognition, and Computation Workshop is an interdisciplinary forum for graduate students and faculty whose work addresses human language, both spoken and signed, from a variety of perspectives: cognitive, computational, experimental, theoretical, and their intersection. The Workshop regularly invites guests and researchers from outside the University as well.

#### LANGUAGE, VARIATION & CHANGE

Our workshop is a collaborative, interdisciplinary venue for graduate students presenting research related to socio-, anthropological and historical linguistics as well as students focusing on language documentation and fieldwork. This year our theme will be "Under-represented Languages," through which we hope to encourage presentations related to minority language varieties in the United States as well as globally under-studied languages, especially those for which University of Chicago graduate students and faculty have conducted fieldwork. Our faculty sponsors are from Linguistics and Slavic Language and Literature, and we have regular participation from language experts in Near Eastern Languages and Civilizations, Anthropology, Comparative Human Development, and Classics, making our workshop a unique and valuable resource across several disciplines.

#### Late Antiquity & Byzantium

We study of all aspects of the peoples, cultures, histories, and religions of the Late Antique and Byzantine world, including Near Eastern and Slavic. We encourage communications about recent archaeological discoveries across the region. We also welcome presentations about methodologically and substantively related topics in the early Medieval West, and forward projections of Late Antique and Byzantine culture, very broadly conceived, into Modern Times.

#### LATIN AMERICA & THE CARIBBEAN

The Workshop on Latin America and the Caribbean is an interdisciplinary forum and intellectual community for graduate students and faculty whose work and research is focused on Latin America or the Caribbean. The workshop hosts regular presentations of work in progress by students, faculty, and invited guests, as well as special events and gatherings. Participants come from a wide range of disciplines from across the social sciences and humanities, enabling an interdisciplinary conversation and exchange around questions of common interest to those whose work focuses on the region.

#### LATIN AMERICAN HISTORY

The Latin American History Workshop (LAHW) explores an eclectic array of questions in the history of Latin America and the Caribbean from around 1450 to the present. Graduate students and faculty in History and other disciplines take part in critical discussions of research papers centered on a range of places and historical topics within the region. The conversation that takes place in the Workshops devotes itself to questions of method and content as well as questions of each work's insertion into broader Latin Americanist scholarship. The objective is to provide a space for open exchange and evaluation of ideas in the field while furnishing constructive feedback to student, faculty and guest presenters.

#### LITERATURE & PHILOSOPHY

The Literature and Philosophy Workshop is a forum for discussion among graduate students and faculty interested in questions raised at the intersection of philosophy and literature. We work across traditional disciplinary boundaries to encourage a conversation that transcends historical and geographic divisions. Topics of interest to the workshop include (but are not limited to) the philosophy of literature and vice-versa, the overlap of philosophy and literature in the intellectual imaginary, intellectual and/or literary exchange between philosophers and literary figures, and hybrid forms of cultural production (e.g., myth).

#### LINGUISTICS & PHILOSOPHY

Language and communication are central topics of investigation in both philosophy and linguistics, and there have been important interactions between the fields over the past decades, particularly in the area of the study of meaning. At the same time, the fields also differ in goals, methods, and emphases. For example linguists, unlike philosophers, are concerned with and guided by patterns of crosslinguistic variation and language acquisition. Philosophers, unlike linguists, are concerned with the normativity of language and the metaphysical implications of linguistic phenomena and linguistic analyses. The aim of this workshop is to bring scholars investigating language and communication from linguistic and philosophical perspectives into dialogue with one another, thereby stimulating

cross-disciplinary discussions and mutual understanding of their different questions, methods and results.

#### MASS CULTURE

The Mass Culture Workshop is a forum for recent and ongoing academic research on the historical, theoretical, and practical dimensions of modern mass (commercial, consumer, or popular) media, including cinema, television, journalism, popular music, photography, advertising, fashion, public amusements, and computer technology. While we do consider interpretive problems presented by individual works and different types of mass media, our focus rests on broader questions regarding the key role mass culture plays in the formation of contemporary public spheres. Because the scope of many forms of mass culture extends beyond the boundaries of any one discipline, the workshop is committed to interdisciplinary work.

#### MEDIEVAL STUDIES

Started in 1994, the University of Chicago's Medieval Studies Workshop brings together faculty and graduate students from the University and from the wider Chicago community. The Medieval Studies Workshop currently sponsors faculty and student speakers each academic year and meets on alternate Fridays at 12:00 p.m. in Wieboldt 207. Our members — either medievalists or those with an interest in the medieval period — come from a wide variety of disciplines including Art History, English, Divinity, History, Music, Linguistics, Romance and Germanic Languages and Literatures, and Near Eastern Languages and Civilizations (NELC). While workshop sessions tend to focus on the European Middle Ages, c. 500-1500, we have sponsored speakers on related areas such as Islamic and Byzantine studies.

#### MEMORY & TRAUMA

The Memory & Trauma Study Group provides an interdisciplinary forum for the discussion of the notions of memory and trauma as they apply to different fields of research. Topics of interest to the workshop include (but are not limited to): memory and trauma in different artistic media; representation of witnessing; memorial and commemorative practices; trauma and loss; politics of memory as related to issues of gender, race, and national identity; the symptomology of trauma (melancholy, nostalgia, PTSD).

#### METAPHOR

The workshop provides an interdisciplinary forum for inquiry into the vast reach of metaphor. We anticipate conversation around ornament, figure, metonymy, allegory, translation, analogy, cognition, and epistemology; we hope to stimulate consideration of philosophical, legal and theological argument; we invite reflection on hermeneutics, gnosis, propriety and poetics.

#### MIDDLE EAST HISTORY & THEORY

This workshop focuses on the history, culture, literature, and societies of the Middle East since late antiquity by facilitating a dialogue among graduate students

who approach the Middle East from disparate methodological, temporal, and geographic perspectives.

#### MUSIC HISTORY/THEORY

This workshop provides a forum for students, faculty, and other scholars to explore contemporary approaches to music history, music theory, and the ways in which these two disciplines intersect. Allowing for a variety of disciplinary perspectives and multiple modes of presentation, the workshop aims to foster scholarly dialogues on involving music history and theory across a broad community of scholars.

#### PHILOSOPHY OF RELIGIONS

The Philosophy of Religions Workshop encourages philosophically elaborated work that is contextually related to any of the world's religions. Such work considers modern or pre-modern thinkers, advancing positions either based on the content of some religious belief or taking some religious commitment only as a starting point and incentive for philosophical inquiry rather than the primary focus. Its aim is to present new and unexpected challenges to contemporary European or Anglo-American philosophy via this sort of dialogue.

#### POETRY & POETICS

The Poetry and Poetics Workshop has two simple but ambitious aims. The first is to foster scholarship devoted to fundamental issues in the practice and criticism of poetry in all languages and across all historical periods. The second is to provide a supportive forum for graduate students writing on poetry and poetics. The workshop does not advocate a single approach to its subject, but rather encourages a mixed set of historical, formal, and philosophical perspectives on the art.

#### POLITICAL PSYCHOLOGY

The Political Psychology Workshop aims to consolidate the research goals of political science and psychology. Political science (https://xmail.uchicago.edu/owa/redir.aspx? C=AB0Vr3yAQkiFxuf8xwa18N9rbEfAZM8I5xNrAI69kdGPixZmIKsboXAbWrYkxigbJFtSdspNt%3a%2f%2fpolitical-science.uchicago.edu) involves topics such as the relationship between citizens and politics, policy issues, and the state itself. Theoretical and empirical work on these topics is strengthened by incorporating knowledge from topics in psychology such as social trust, attitude formation, attribution, and persuasion. Social psychology (https://xmail.uchicago.edu/owa/redir.aspx? C=AB0Vr3yAQkiFxuf8xwa18N9rbEfAZM8I5xNrAI69kdGPixZmIKsboXAbWrYkxigbJFtSdspNt%3a%2f%2fpsychology.uchicago.edu%2facademics%2fdoctoral%2fsocial%2f) explores how the mind works in social contexts, and the field gains strength from the recognition that the political world is a vibrant, important social context. We aim, especially, to encourage graduate students to draw upon the faculty and other resources at the University of Chicago for such interdisciplinary study.

#### POLITICAL THEORY

This workshop is a forum for the critical discussion of new research in all varieties of political theory, political philosophy, and moral, social, and legal theory and philosophy, historical and contemporary. Presenters include graduate students, faculty from the University and other local institutions, and prominent visitors. Graduate students also have the opportunity to serve as discussants for presentations by other students, faculty, and visitors. The workshop subscribes to no particular methodology or political ideology and welcomes participants from all departments and disciplines. We seek to create a rigorous but comfortable space for the development of graduate student projects and professional skills.

#### PRACTICAL PHILOSOPHY

This workshop is a forum for those interested in ethics, conceived broadly to include normative moral philosophy, metaethics, action theory, moral psychology, political philosophy, and the theory of practical reason. Our activities are divided among graduate student presentations of dissertation chapters, the hosting of outside speakers, and faculty presentations of their own work in progress. We hope, over time, to build a campuswide community of scholars who are interested in the following pair of questions as well as their relationship to one another: What is it to act? What is it to act well?

#### **RELIGION & ETHICS**

The workshop provides a venue to explore the intersections of religion and the modern day ethical domains (bio-ethics, environmental ethics, social/political ethics, etc.), as well as historical engagement with thinkers whose work has influenced our understanding of the relationship between ethics and religion. The nature of the workshop is interdisciplinary, bringing into conversation perspectives from within specific religious traditions and other fields of study, such as medicine, the social sciences and humanities. Our meetings consist of papers being given by regular participants, dissertation chapters, faculty presentations, visiting guest speakers, professional development panels, and periodic conferences. Participants include students and faculty within the Divinity School as well as those in related disciplines with interests in religion and ethics.

#### RELIGIONS IN AMERICA

The Religions in America Workshop explores the role of religion in American culture from the colonial period to the present day. The workshop engages in historiographical, theoretical, and methodological discussions about the place of religion in American life by focusing on issues and topics such as gender, race, consumer culture, the separation of church and state, politics, literature, theology, and music. The workshop welcomes scholars from a variety of academic disciplines, including the Divinity School, History Department, English Department, Sociology Department, Political Science Department, Music Department, and Anthropology Department. Presentations by students and faculty, as well as by distinguished guest speakers, take place in a relaxed, discussion-oriented environment designed

to further the research, inquiry, and knowledge of both presenters and participants alike.

#### RENAISSANCE

The emphasis of the workshop is on cross-disciplinary study of English and European culture during the Renaissance, in areas such as literature, art, politics, theology, and natural science. Our interests include early modern poetry, prose, and drama, humanist pedagogy, politics and law, theological controversy, book history, the literature of trade and exploration, the history of the emotions, and much more. Student presentation in the form of article drafts, dissertation proposals or chapters, practice job interview presentations and practice campus visit talks are given priority. We will also meet with scholars from other institutions and hear from members of Chicago's faculty. The workshop meets on alternate Mondays at 5:00 p.m. in Rosenwald 405.

#### REPRODUCTION OF RACE & RACIAL IDEOLOGIES

This interdisciplinary workshop address the different processes of racialization experience within groups as well as across groups in sites as diverse as North America, Latin America, the Caribbean, Africa, the Asian Pacific, and Europe. This workshop will examine theoretical and practical considerations of scholarship that highlights the intersection of race and ethnicity with other identities such as gender, class, sexuality, and nationality and interrogates social and identity cleavages within racialized communities. Fundamentally the workshop is committed to engaged scholarship that rejects the false dichotomy between rigorous intellectual work and community activism.

#### RHETORIC & POETICS

The Rhetoric and Poetics Workshop is concerned with the literature of classical Greece and Rome, considered either on its own terms or in relation to the literature and poetry of other cultures. It invites presentation of critical arguments completed or in progress from the broadest possible range of perspectives. The Workshop meets approximately five times per quarter, on Thursday afternoons at 3:30 in the Classics Seminar Room (Classics 21).

#### SCIENCE, LITERATURE & THE ARTS

This workshop explores the manifold relationships among science, literature, and the arts from past to present. We are interested in the ways in which literature, music and the visual arts have been shaped by the scientific discourses of their time. Concurrently, we explore the influences of the literary and artistic imagination in the realm of science. Our discussions are open to topics of wide historical and thematic range: from ancient natural history to modernism; early modern literary and scientific fantasies to the 19<sup>th</sup>-century science and literature of the mind. We welcome literary and cultural scholars, historians of science, and you!

#### SELF & SUBJECTIVITY

In this workshop, we explore the parallels, tensions, and places for dialog between two interdisciplinary approaches toward human interiority: 1) a research tradition in psychological anthropology and cultural psychology which has examined the sources of psychological diversity, with an emphasis on the concept of "self"; and 2) a recent body of work has centered around the concept of "subjectivity," often understood as an approach to psychological experience closely attuned to issues of hierarchy, history and global economic and political processes. Given the dearth of substantive conversation between these conceptual frameworks, this workshop provides a forum for students and faculty to discuss innovative research while engaging with both "self" and "subjectivity" approaches to human interiority.

#### SEMIOTICS: CULTURE IN CONTEXT

This workshop seeks to advance research based on a semiotic framework. Presentations will come from a variety of fields including but not limited to linguistics, psychology, sociology, political science, literary theory, and anthropology. By not limiting the topic of research by area, period or discipline, the workshop encourages discussion to center on how to study social and cultural phenomena as embedded in a meaningful context. By building on many seminal studies that have used semiotic approaches, the goal of the workshop is to continue to develop the rigorous analytic framework that provides the method for clearly defining linkages between the object of analysis and its context.

#### SOCIAL HISTORY

The Social History Workshop provides an academic forum for the discussion and development of work that takes seriously the history of everyday life. The workshop often engages work that studies people who have been excluded from dominant historical narratives. While the workshop focuses primarily on the United States, it also seeks to examine issues that transcend North America's borders. These issues and themes include but are not limited to race, class, gender, sexuality, and politics. Participants include graduate students and faculty in social, cultural, political and intellectual history and other related disciplines. Work presented includes dissertation proposals, chapters in progress, and drafts of conference papers, in addition to presentations by visitors.

#### SOCIAL THEORY

This workshop explores the social theoretical dimension of a wide variety of issues dealt with by disciplines in the social sciences and humanities. The emphasis is less on analyzing the work of various social theorists (although such investigation also takes place) than on exploring in a sustained fashion the social theoretical implications of the participants' work. Themes to be addressed are likely to include large-scale historical changes of the modern world, the relation between social and cultural transformations, questions of the public sphere and civil society, social movements, democracy, and capitalism, the relation between colonialism and the expansion of capital, and conceptual issues posed by globalization.

#### SOCIAL THEORY & EVIDENCE

The Social Theory and Evidence Workshop is a forum for graduate students and faculty to grapple with two foundational questions that animate social scientific research: 1) What constitutes a strong theory? and 2) What sort of empirical evidence do we need to build an argument to support claims about the social world? These core questions underlie many longstanding debates in social science, as they address fundamental concerns about causal inference, the logic of inquiry, and the merits of various methodological and theoretical approaches to social scientific puzzles.

#### THEATER & PERFORMANCE STUDIES

The workshop in Theater & Performance Studies seeks to provide a forum for questions of performance that have arisen in a host of disciplines across the divisions, including Anthropology, Cinema & Media Studies, East Asian Languages and Cultures, English, Germanic Studies, History, Music, Romance Languages, and Slavic Languages. In addition, the workshop seeks to extend to the graduate level a systematic reflection on the longstanding divide between the theories and praxes of performance that has, for the past few years, animated work in the undergraduate committee on theater and performance studies.

#### **THEOLOGY**

The Theology Workshop is a forum for discussion of new work in theology, understood as critical reflection upon doctrines, texts, practices, and material cultures of religions. Students, faculty, and visiting scholars present across the full range of Christian theological subdisciplines (systematic/constructive, historical, moral, practical, and biblical) as well as the theologies and philosophies of other religious traditions. All methodological approaches, historical periods, and geographical contexts are welcome for discussion. Interdisciplinary approaches are encouraged. Workshop meets twice monthly.

#### THEORY & PRACTICE IN SOUTH ASIA

The TAPSA workshop and its associated Graduate Student Conference are important parts of the fabric of intellectual activity in South Asian studies at the University of Chicago. TAPSA talks are scheduled in coordination with the South Asia Seminar, to provide regular interdisciplinary intellectual events, including papers by University of Chicago advanced graduate students, or visiting scholars and faculty. The format of TAPSA talks is a 45-50 minute presentation followed by 30-40 minutes of discussion.

#### Transnational Approaches to Modern Europe

Transnational Approaches to Modern Europe offers a forum to discuss and critique works in progress concerning the history, culture, and societies of Modern Europe, including France, Germany, Eastern and Central Europe, and Russia/the Soviet Union. This year the workshop will focus on the presentation and discussion of research that is transnational in methodology or content. Presenters come from the University faculty and graduate students as well as invited scholars working on

related research projects. The workshop is a place to discuss current research and is the focal point of a larger interdisciplinary community of scholars and Chicago graduate students interested in European History.

#### United States Locations

The workshop explores current ethnographic research on the United States. While emphasizing anthropological approaches, we provide a forum for all ethnographers examining the US as a socio-cultural entity, within, across, and outside the boundaries of North America. Over the past decade, a re-emergent anthropology of the US has incorporated the legacies of ethnographic sociology, critical geography and sociolinguistics. Continuing in this tradition, we invite scholars from across the disciplines to participate in regular meetings. We will critically analyze the burgeoning literature on ethnographic practice and theory, as well as focus on carefully formulated empirical studies.

#### Visual & Material Perspectives on East Asia

This workshop is focused on the study of material and visual objects from East Asia (defined to include China, Central Asia, Korea and Japan, and other regions). It explores the possible uses of recent theories of art, history, and material and visual culture in the study of East Asia. Presentations of studies of objects and visual materials from a variety of historical periods and geographical concerns within East Asia serve as case studies for the exploration of such methodological concerns. The workshop is about two-thirds student presentations and about one-third outside speakers.

#### WESTERN MEDITERRANEAN CULTURE

The Western Mediterranean Culture Workshop addresses the cultures of five regions/countries (France, Italy, Portugal, Spain and North Africa, including parts of the Ottoman Empire). It deals with literatures in at least eight languages - Arabic, Catalan, French, Italian, Latin, Portuguese, Spanish and Turkish - as well as visual arts, music, and other forms of cultural production. The workshop involves faculty members and graduate students from a variety of backgrounds and disciplines, including many from the Departments of Romance Languages and Literatures, Art History, Music, and Near Eastern Languages and Civilizations.

#### WITTGENSTEIN

The Wittgenstein Workshop aims to foster a variety of forms of interdisciplinary research that take their point of departure from a shared interest in Wittgenstein's intellectual achievement. The workshop will seek to provide a forum in which the following activities can be pursued in conjunction with one another: (1) the careful study of Wittgenstein's contributions to both philosophy and other disciplines, (2) the discussion of current research by graduate students with related interests, (3) the presentation of work by some of the leading contemporary scholars at work in these areas.

## ADDITIONAL PROGRAMS IN THE CENTERS AND INSTITUTES MAY BE FOUND ON THE FOLLOWING PAGES.



## INSTITUTE FOR BIOPHYSICAL DYNAMICS

#### Director

- Chuan He, Chemistry Professors
- Francisco Bezanilla, Biochemistry and Molecular Biology
- Aaron Dinner, Chemistry
- · Benjamin Glick, Molecular Genetics and Cell Biology
- Chuan He, Chemistry
- · Stephen Kent, Biochemistry and Molecular Biology
- · Anthony A. Kossiakoff, Biochemistry and Molecular Biology
- Ka Yee C. Lee, Chemistry
- · Keith Moffat, Biochemistry and Molecular Biology
- Tao Pan, Biochemistry and Molecular Biology
- Eduardo Perozo, Biochemistry and Molecular Biology
- Benoit Roux, Biochemistry and Molecular Biology
- Norbert Scherer, Chemistry
- L. Ridgway Scott, Computer Science, Mathematics
- Tobin R. Sosnick, Biochemistry and Molecular Biology
- Andrei Tokmakoff, Chemistry
- Gregory Voth, Chemistry Associate Professors
- Greg Engel, Chemistry
- Margaret Gardel, Physics
- Ronald Rock, Biochemistry and Molecular Biology Assistant Professors
- · David Biron, Physics
- Edwin Munro, Molecular Genetics and Cell Biology
- Bozhi Tian, Chemistry

The University of Chicago has established the Institute for Biophysical Dynamics (http://ibd.uchicago.edu) to meet the challenges of achieving a molecular-level understanding of the structure, diversity and function of biological entities. The Institute represents new approach to scientific research at the interface between biology and the physical sciences, bringing together experimentalists, theoreticians, and computational scientists to forge a scientific culture of fluid exchange of ideas and collaboration across disciplines and among laboratories.

In addition, the Institute has established training programs to involve undergraduate, graduate, and postdoctoral students in this new cross-disciplinary approach to science. This culture of interdisciplinary research provides paths for insights developed at the laboratory bench to profoundly influence endeavors as diverse as molecular-based computing and the treatment of illness at the bedside.

Institute for Biophysical Dynamics Gordon Center for Integrated Science, W101 929 East 57th Street, Chicago, IL 60637



## Comparative Race and Ethnic Studies

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- Ralph A. Austen History Emeritus
- Lauren Berlant English
- Philip Bohlman- Music and the Humanities in the College
- Dain Borges History
- Matthew Briones- American History and the College
- Chad Broughton-Public Policy & Chicago Studies Program
- Adrienne Brown- English
- Melvin Butler-Music
- · Kerwin Charles- Harris School
- Yoon Sun Choi- School of Social Service Administration
- Cathy Cohen Political Science
- Jennifer Cole Human Development
- Herschella Conyers- Law School
- Raul Coronado- Englsih
- Jane Dailey- American History
- Shannon Dawdy Anthropology
- Michael Dawson Political Science
- Daniel DeSorMeaux- French Literature

- Darby English- Art History
- Curtis Evans- Divinity
- · Thomas Fisher- Medicine
- Raymond Fogelson- Anthropology
- Anton Ford- Philosophy
- Cecile Fromont- Art History
- · Craig Futterman- Law School
- Leela Gandhi- English
- Melissa Gilliam- Obstetrics/Gynecology and Pediatrics
- Henry Ginard-Surgery
- John A. Goldsmith Linguistics
- Robert Gooding-Williams- Political Science
- Adam Green- History
- Roberto Gonzalez-Social Service Administration
- · Ramon Gutierrez- United States History and the College
- Thomas Holt History
- Dwight Hopkins-Theology in the Divinity School
- Dennis Hutchinson College and Law School
- Reginald Jackson- East Asian Lang & Civilizations
- · Travis Jackson- Music and the Humanities
- Rachel Jean-Baptiste History
- Waldo E. Johnson, Jr.- Social Service Administration
- Arthur Damon Jones- Harris School Public Policy
- Micere Keels- Department of Comparative Human Development
- John Kelly- Anthropology
- Karen- Kims- Professor of Medicine
- Emilio Kouri-History
- Loren Kruger Comparative Literature and English
- Donald N. Levine Sociology Emeritus
- Agnes Lugo-Ortiz-Romance Languages & Literatures
- William McDade- Anesthesia & Critical Care; Deputy Provost for Research & Minority Issues
- Omar M. McRoberts Sociology
- Alfredo César Melo-Luso-Brazilian Lit.
- Doriane Miller- Medicine
- Salikoko Mufwene Linguistics
- Dolores G. Norton Social Service Administration (Emeritus)
- Eric Oliver- Political Science
- Olufunmilayo Olopade- Medicine and Human Genetics Human
- Emily L. Osborn History

- Jennifer Palmer- Liberal Arts
- Stephan D. Palmie Anthropology
- Virginia Parks- Social Service Administration
- Tianna Paschel- Political Science
- Charles Payne- Social Service Administration
- Monica Peek-BSD
- Srikanth"Chicu" Reddy- English
- François G. Richard Anthropology
- · Gina Miranda Samuels-Social Service Administration
- Julie Saville History
- Mario Small-Sociology
- Margaret Beale Spencer- Urban Education
- Randolph Stone- Law School
- Forrest Stuart-Sociology
- · Monica Vela- Medicine
- Dexter Voisin- Social Service Administration
- Robert von Hallberg English
- Kenneth Warren English
- Miwa Yasui- Social Service Administration
- Rebecca Zorach- Art History

The B.A. program in Comparative Race and Ethnic Studies offers an interdisciplinary curriculum through which students can examine the histories, languages, and cultures of the racial and ethnic groups in and of themselves, in relationship to each other, and, particularly, in structural contexts of power. Focusing on genocide, slavery, conquest, confinement, immigration, and the diaspora of peoples around the globe, Comparative Race and Ethnic Studies examines the material, artistic, and literary expressions of peoples who originated in Africa, Latin America, Asia and Europe, who moved voluntarily or were forcefully bound over to the Americas, and here evolved stigmatized identities, which were tied to the cultures and histories of their natal lands in complicated ways.

A student who obtains a B.A. in Comparative Race and Ethnic Studies will be well prepared for admission to graduate programs in the humanities and social sciences, to professional schools in law, medicine, public health, social work, business, or international affairs, and to careers in education, journalism, politics, creative writing, and the nonprofit sector. A degree in Comparative Race and Ethnic Studies offers training designed to impart fundamental skills in critical thinking, comparative analysis, social theory, research methods, and written expression. This major/minor is also available to students interested in the study of Africa in a comparative framework.

Additional information about the undergraduate program can be found in the College Catalog (https://upcomingcatalog.uchicago.edu/thecollege/comparativeraceethnicstudies).

The CSRPC also maintains a list of Courses with Substantial Content on Race and Ethnicity: http://csrpc.uchicago.edu/courses/

For further information on the committee, contact Y. Kafi Moragne-Patterson, CRES Student Affairs Administrator at the Center for the Study of Race, Politics, & Culture, 5733 S. University, Chicago, IL 60637, telephone: 773-834-8736, email: kmoragne@gmail.com.

#### COMPARATIVE RACE AND ETHNIC STUDIES COURSES

#### CRES 30104. Urban Structure and Process. 100 Units.

This course reviews competing theories of urban development, especially their ability to explain the changing nature of cities under the impact of advanced industrialism. Analysis includes a consideration of emerging metropolitan regions, the microstructure of local neighborhoods, and the limitations of the past U.S. experience as a way of developing worldwide urban policy. Instructor(s): O. McRoberts Terms Offered: Spring

#### CRES 31800. Religious Movements in Native North America. 100 Units.

Religious beliefs and practices are assumed to be primordial, eternal, and invariable. However a closer examination reveals that Native American religions are highly dynamic and adaptive, ever reactive to internal pressure and external circumstances. Perhaps the most dramatic forms of religious change are the transformations that anthropologists recognize as nativistic or revitalization movements. These movements on one level represent conscious breaks with an immediate negative past, and they anticipate a positive future in which present sources of oppression are overcome. Many contemporary Native American movements, political and/or religious, can be understood as sharing similar dynamics to past movements. We examine classic accounts of the Ghost Dance, often considered to be the prototypical Native American religious movement; the analysis of the Handsome Lake religion among the Senecas; and other Native American religious movements.

Instructor(s): R. Fogelson

Prerequisite(s): Advanced standing and consent of instructor

#### CRES 34501. Anthropology of Museums I. 100 Units.

Instructor(s): M. Fred Terms Offered: Winter

Prerequisite(s): Advanced standing and consent of instructor

Equivalent Course(s): ANTH 24511, ANTH 34502, CHDV 38101, MAPS 34500, SOSC

34500

#### CRES 34502. Anthropology of Museums II. 100 Units.

Instructor(s): M. Fred Terms Offered: Spring

Prerequisite(s): Advanced standing or consent of instructor

Equivalent Course(s): ANTH 24512,SOSC 34600

#### CRES 38333. Improvisational Dramaturgy. 100 Units.

Team-taught by Catherine Sullivan and visiting composers Sean Griffin and George Lewis, Improvisational Dramaturgy explores interdisciplinary and improvisational strategies for performance. Course work will be integrated with the development of a staging of an operatic composition by Lewis. Tentatively titled "Afterword," the piece explores the ecology of Lewis's 2008 award-winning book, *A Power Stronger Than Itself: The A.A.C.M. and American Experimental Music.* Issues of public assembly, spatial language, music as social text, documentation, collaboration, and the dynamics of improvisation will be explored in theory, history, and practice. The class will work as an ensemble, contributing original material and working with various groups both on and off campus. Students working in all disciplines are welcome. This course is sponsored by a Mellon Fellowship for Arts Practice and Scholarship at the Gray Center for Arts and Inquiry.

Instructor(s): C. Sullivan, S. Griffin, G. Lewis Terms Offered: Spring Equivalent Course(s): ARTV 23833,ARTV 33833,CRES 23833,MUSI 26114,MUSI 38214,TAPS 28429

### CRES 40110. Color, Ethnicity, Cultural Context, and Human Vulnerability. 100 Units.

The specific level of vulnerability may vary across the life course; nevertheless, all humans are vulnerable and, thus, unavoidably possess both risks and protective factors. The level and character of human vulnerability matters and has implications for physical health, psychological well being, the character of culture, and mental health status. The balance between the two (i.e., risks and protective factors) can be influenced by ethnic group membership and identifiability (e.g., skin color). The cultural contexts where growth and development take place play a significant role in life course human development. As a globally admired cultural context with a particular national identity, one of America's foundational tenets is that citizenship promises the privilege of freedom, allows access to social benefits, and holds sacred the defense of rights. Our centuries-old cultural context and national identity as a liberty-guaranteeing democracy also presents challenges. The implied identity frequently makes it difficult to acknowledge that the depth of experience and its determinative nature may be but skin deep. In America, there continues to be an uneasiness and palpable personal discomfort whenever discussions concerning ethnic diversity, race, color and the Constitutional promise and actual practice of equal opportunity occur. Other nations are populated with vulnerable humans, as well, and experience parallel dissonance concerning the social tolerance of human diversity.

,Given the shared status of human vulnerability, the course unpacks and analyzes how differences in ethnicity, skin color and other indicators of group membership impact vulnerability and opportunity for diverse groups. Specifically, the course analyzes the balance between risk level and protective factor presence and examines the consequent physical health status, psychological well-being, and mental health outcomes for its dissimilar citizens. The course especially emphasizes the American cultural context but, in addition, highlights the unique experiences of ethnically varied individuals developing in multiple cultural contexts around the globe. (D, 4) Instructor(s): M. Spencer Terms Offered: Autumn

Prerequisite(s): Undergraduates require permission from instructor.

Equivalent Course(s): CHDV 40110

#### CRES 50004. Colloquium: Post-Colonial Africa. Units.

This course explores debates in narrating social, cultural, political and economic change in Africa since 1945. Exploring the recent interest in what historian Frederick Cooper calls "the past of the present," the course will incorporate a variety of disciplinary, methodological and epistemological perspectives. Topics to be explored include: decolonization; the interactions of states and civil society; migration and urbanization; the politics of gender and sexuality; development and globalization; popular culture; health and medicine; and postcolonial theory. Course materials will include historical monographs,, ethnography fiction, memoirs, visual media and films, as well as written and oral primary sources. This course aims to provide students with theoretical and methodological tools to narrate contemporary history. Instructor(s): R. Jean-Baptiste Terms Offered: Spring

Equivalent Course(s): HIST 50004, ANTH 52105, HMRT 50004



#### CENTER FOR EAST ASIAN STUDIES

#### Director

- Donald Harper
  - Associate Director
- Theodore N. Foss, China and Korea Studies
- Sarah Arehart, Japan Studies
  - Center Coordinator
- Theresa Couch
  - Faculty
- Guy S. Alitto History
- Michael Bourdagh East Asian Languages & Civilizations
- Susan Burns History
- Fangpei Cai East Asian Languages & Civilizations
- Tamara Chin Comparative Literature
- Kyeong Hee Choi East Asian Languages & Civilizations
- Julie Chu Anthropology
- Paul Copp East Asian Languages & Civilizations
- Bruce Cumings History
- Xinyu Dong Cinema and Media Studies
- Jacob Eyferth East Asian Languages & Civilizations
- Judith Farquar Anthropology
- Michael Fisch Anthropology
- Ping Foong Art History
- Chelsea Foxwell Art History
- Thomas Ginsburg Law
- Susan Goldin Meadow Psychology
- Donald Harper East Asian Languages & Civilizations
- James Hevia International Relations
- Dwight Hopkins Divinity School
- Christopher Hsee Booth School of Business & Behavioral Science
- Chang Tai Hsieh Booth School of Business
- Paola Iovene East Asian Languages & Civilizations
- Reginald Jackson East Asian Languages & Civilizations
- Matthew Kapstein South Asian Languages & Civilizations
- Yoko Katagiri East Asian Languages & Civilizations
- James E. Ketelaar History
- Hi-Sun Kim East Asian Languages & Civilizations
- Jieun Kim East Asian Languages & Civilizations

- Cheol-Sung Lee Sociology
- Meng Li East Asian Languages & Civilizations
- Yuxiang Liu East Asian Languages & Civilizations
- Hoyt Long East Asian Languages & Civilizations
- Harumi Lory East Asian Languages & Civilizations
- Misa Miyachi East Asian Languages & Civilizations
- Hiroyoshi Noto East Asian Languages & Civilizations
- Kenneth Pomeranz History
- Haun Saussy Comparative Literature
- Edward Louis Shaughnessy East Asian Languages & Civilizations
- Bernard S. Silberman Political Science
- Laura A Skosey East Asian Languages & Civilizations
- Richard Jean So English Language & Literature
- Ruey Tsay Business
- · Grace Tsiang Economics
- Katherine Tsiang Center for the Art of East Asia
- Youqin Wang East Asian Languages & Civilizations
- Hung Wu Art History
- Ming Xiang Linguistics
- Kazuo Yamaguchi Sociology
- Dali Yang Political Science
- Jun Yang East Asian Languages & Civilizations
- Alan Yu Divinity
- Chun-Su Yuan Anesthesia & Critical Care
- Judith Zeitlin East Asian Languages & Civilizations
- Dingxin Zhao Sociology
- Brook Ziporyn Divinity School

Professors Emeriti

- C. C. (George) Chao
- · Norma Field
- Tetsuo Najita
- · William Parish
- · David Roy
- George Tiao
- Tsuen-Hsuin Tsien
- N. C. Yang
- Anthony C. Yu

The Center for East Asian Studies (CEAS) is an interdepartmental and interdivisional coordinating body whose primary functions include promoting student and faculty research in East Asian Studies and sponsoring special events.

For the A.M. and the Ph.D. degrees, students specializing in Chinese, Japanese, or Korean Studies must be enrolled in one of the regular departments of the University. Courses in the various fields of East Asian Studies are offered in several departments in both the Division of the Humanities (see listings for the Departments of Art History, Cinema and Media Studies, East Asian Languages & Civilizations, and Linguistics in these Announcements) and the Division of the Social Sciences, as well as the Divinity School, the Law School, and the Graduate School of Business.

CEAS supports graduate training and basic research through fellowship programs and faculty research grants. It works closely with the East Asian Library to build resources for current and future research needs. Through seminars, workshops, and public lectures, CEAS promotes intellectual exchange among scholars in the field.

The East Asian Library is one of the world's most distinguished East Asian research collections, and contains over 840,000 volumes in East Asian languages. It is particularly strong in history, politics, classics, literature, and local institutions.

CEAS also has a list of resources of other facilities that exist within the city of Chicago for the study of East Asia for both members of the University and interested members of the Chicago community. The Field Museum of Natural History and the Art Institute of Chicago display notable and extensive collections of objects from East Asia of anthropological and artistic interest; in addition, their libraries are available for consultation by students.



## CENTER FOR EAST EUROPEAN AND RUSSIAN/EURASIAN STUDIES

#### Director

- Victor A. Friedman
  - Associate Director
- Meredith Clason
  - Outreach and Campus Programs Coordinator
- Dana Immertreu
  - Faculty
- Cori Anderson Slavic Languages & Literatures
- Helga Anetshofer Near Eastern Languages & Civilizations and the College
- Kagan Arik Near Eastern Languages & Civilizations and the College
- Howard I. Aronson Slavic Languages & Literatures and Linguistics (Emeritus)
- Robert Bird Slavic Languages & Literatures, Cinema & Media Studies and the College
- Philip Bohlman Music and Committee on Jewish Studies
- John W. Boyer History and the College
- Susanne Cohen Anthropology
- Robert Dankoff Near Eastern Languagues & Civilizations (Emeritus)
- Bill J. Darden Slavic Languages & Literatures and Linguistics (Emeritus)
- June P. Farris Slavic and East European Collections, Regenstein Library
- Sheila Fitzpatrick History (Emerita)
- Cornell Fleischer Near Eastern Languages & Civilizations, History and the College
- Victor Friedman Slavic Languages & Literatures, Linguistics and the College
- Paul Friedrich Anthropology, Linguistics and Social Thought (Emeritus)
- Susan Gal Anthropology, Linguistics and the College
- · Leonid Gavrilov Center on Aging, NORC
- Natalia Gavrilova Population Research Center, NORC
- Anastasia Giannakidou Linguistics and the College
- Eleonory Gilburd History
- Thomas Ginsburg Law School
- Yaroslav Gorbachov Slavic Languages & Literatures
- Lenore Grenoble Slavic Languages & Literatures, Linguistics and the College
- Jonathan M. Hall History, Classics and the College
- Eric P. Hamp Linguistics, Slavic Languages & Literatures, and Psychology (Emeritus)
- Hripsime Haroutunian Near Eastern Languages & Civilizations and the College

- Faith Hillis History and the College
- Angelina Ilieva Slavic Languages & Literatures
- Norman W. Ingham Slavic Languages & Literatures (Emeritus)
- Leyla Ismayilova School of Social Service Administration
- Matthew Jesse Jackson Art History, Visual Arts, and the College
- Andrew Janco Human Rights Program
- Larisa Jašarević Program in International Studies
- Walter E. Kaegi History and the College
- Hakan Karateke Near Eastern Languages & Civilizations
- Kinga Kosmala Slavic Languages & Literatures
- · James Leitzel Public Policy Studies and the College
- Sandra Levy Slavic and East European Collections, Regenstein Library
- Ofer Malamud Harris School of Public Policy Studies
- Stanislav Markus Political Science and the College
- Boris Maslov Comparative Literature and the College
- John J. Mearsheimer Political Science and the College
- Paul Mendes-Flohr Divinity School
- Jason Merchant Linguistics and the College
- Martha Merritt Associate Dean Academic Affairs and Development
- Michael Murrin English, Comparative Literature, Divinity School and the College
- William Nickell Slavic Languages & Literatures
- Charles Payne School of Social Services Administration
- John Perry Near Eastern Languages & Civilizations (Emeritus)
- Nada Petkovic-Djordjevic Slavic Languages & Literatures
- Valentina Pichugin Slavic Languages & Literatures
- Eric Posner Law School
- Marta Ptaszynska Music
- Eugene Raikhel Comparative Human Development and the College
- Terese Schwartzman Sociology and Committee on Education
- Michael Sells Divinity School
- Bozena Shallcross Slavic Languages & Literatures and the College
- Holly Shissler Near Eastern Languages & Civilizations
- Olga Solovieva Committee on Social Thought
- Lina Steiner Slavic Languages & Literatures and the College
- Malynne Sternstein Slavic Languages & Literatures and the College
- Ronald Suny History and Political Science (Emeritus)
- Natalia Tamarina School of Medicine
- Yuri Tsivian Art History, Slavic, Cinema & Media Studies, Comparative Literature and the College

- Robert Ward Vishny The University of Chicago Booth School of Business
- Tasha Vorderstrasse Oriental Institute
- Bernard Wasserstein History and the College
- Susanne Wengle Political Science
- Diane P. Wood Law School
- John E. Woods History, Near Eastern Languages & Civilizations and the College
- Tamra Wysocki-Niimi Slavic Languages & Literatures
- Alan Yu Linguistics and the College
- Adam Zagajewski Social Thought
- Tara Zahra History and the College
- Marvin Zonis The University of Chicago Booth School of Business (Emeritus)

The Center for East European and Russian/Eurasian Studies (CEERES) is an interdivisional center which promotes the study of, and research about, the countries of Central and Eastern Europe and the former Soviet Union. The University of Chicago has been providing instruction in disciplines of the CEERES region continuously since 1903, when courses in Russian language and area studies were begun. The center now known as CEERES has been in existence since 1965, and it continues to coordinate instruction and facilitate research about Russia/ Eurasia and Eastern/Central Europe, including the Baltic States, the Balkans, the Caucasus, and Central Asia.

In addition to its robust language offerings, CEERES supports curricula which are particularly strong in Russian/Soviet history; Slavic, Balkan, and Caucasian linguistics; nationalities studies of the former USSR; Slavic literatures (Russian, Polish, Czech, Balkan); Russian and East European cultural anthropology; comparative literature; Russian and East European film and art history; and business administration. CEERES affiliated faculty have expertise also in political science, international relations, economics, sociology, and Central and Eastern European, Byzantine, and Ottoman history. The center does not itself offer a separate master's degree; however, it does administer a joint A.M./M.B.A. degree through the Division of the Social Sciences in conjunction with the University of Chicago Booth School of Business. The faculty members that teach and do research in the CEERES area are supported by one of the best libraries in the country.

CEERES has a mission to disseminate information about and increase knowledge of a vast and diverse region of the world. We have a firm commitment to scholarship within the university community that extends to outreach to the greater Chicago community, the nation, and the world. We fulfill our mission through conferences, workshops, and seminars, including close collaboration with the Council on Advanced Studies workshops; by providing curricular support and administering Foreign Language and Area Studies (FLAS) Fellowships; by organizing teacher training workshops and assisting in developing CEERES-focused curricula for K-12 and community college instruction; and by hosting concerts and cultural programming, including music and dance performances, films, and art exhibits open to the general public. We publicize our activities at our website (ceeres.uchicago.edu), through weekly e-bulletins sent through our listsery, and by

means of our biannual newsletter. A number of our events are also recorded and available as free podcasts at our CEERES Media Archive.



#### THE ENRICO FERMI INSTITUTE

#### Director

- Emil J. Martinec, Physics Professors
- Edward Blucher, Physics
- John Eric Carlstrom, Astronomy & Astrophysics
- Cheng Chin, Physics
- Nicolas Dauphas, Geophysical Sciences
- Andrew Davis, Geophysical Sciences
- Henry J. Frisch, Physics
- Lawrence Grossman, Geophysical Sciences
- · Jeffrey A. Harvey, Physics
- Craig Hogan, Astronomy & Astrophysics
- Wayne Hu, Astronomy & Astrophysics
- Alexei Khokhlov, Astronomy & Astrophysics
- Edward James Kibblewhite, Astronomy & Astrophysics
- Young Kee Kim, Physics
- Edward W. Kolb, Astronomy & Astrophysics
- Arieh Königl, Astronomy & Astrophysics
- Andrey Kravtsov, Astronomy & Astrophysics
- · David Kutasov, Physics
- Donald Q. Lamb, Astronomy & Astrophysics
- Emil J. Martinec, Physics
- Frank S. Merritt, Physics
- Stephan Meyer, Astronomy & Astrophysics
- Sidney Nagel, Physics
- Angela Olinto, Astronomy & Astrophysics
- Mark J. Oreglia, Physics
- Paolo Privitera, Astronomy & Astrophysics
- Robert Rosner, Astronomy & Astrophysics
- Melvyn Shochet, Physics
- Dam Thanh Son, Physics
- Michael S. Turner, Astronomy & Astrophysics
- Carlos Wagner, Physics
- Yau W. Wah, Physics
- Robert M. Wald, Physics
- Paul B. Wiegmann, Physics
- Donald G. York, Astronomy & Astrophysics

#### Associate Professors

- Fred Ciesla, Geophysical Sciences
- Juan Collar, Physics
- Savdeep Sethi, Physics
- Scott Wakely, Physics Assistant Professors
- · Richard Hill, Physics
- · Daniel Holz, Physics
- David Schmitz, Physics
- Liantao Wang, Physics Emeritus Faculty
- Edward Anders, Chemistry
- Robert N. Clayton, Chemistry and Geophysical Sciences
- James W. Cronin, Astronomy & Astrophysics and Physics
- Peter G. O. Freund, Physics
- Robert P. Geroch, Physics
- Roger H. Hildebrand, Astronomy & Astrophysics and Physics
- Leo P. Kadanoff, Physics and Mathematics
- Riccardo Levi-Setti, Physics
- Dietrich Müller, Physics
- Yoichiro Nambu, Physics
- Takeshi Oka, Astronomy & Astrophysics and Chemistry
- Eugene N. Parker, Astronomy & Astrophysics and Physics
- James E. Pilcher, Physics
- Jonathan L. Rosner, Physics
- John P. Schiffer, Physics
- James W. Truran, Astronomy & Astrophysics
- S. Courtenay Wright, Physics

The Enrico Fermi Institute (http://efi.uchicago.edu) is a Physical Sciences unit of the University devoted to interdisciplinary research. It was founded shortly after the Second World War as the "Institute for Nuclear Studies" and is now named in honor of Enrico Fermi, who was one of the founders and a distinguished member of the Institute. All faculty members in the Institute hold joint appointments in one or more of the following departments: Physics, Astronomy and Astrophysics, Chemistry, Geophysical Sciences, and Mathematics. Graduate students and postdoctoral scholars working with these faculty members also hold appointments and perform their research in the Institute.

The experimental disciplines currently being pursued include: high-energy particle physics, high-energy astrophysics, studies of particles and fields in the solar system and in space, infrared and optical astronomy, nuclear cosmochemistry, geochemistry, scanning electron and proton microscopy, and solar energy

concentration. Theoretical studies include physics of elementary particles, quantum field theory, theoretical astrophysics and solar physics, plasma physics, cosmology, and general relativity.

The Enrico Fermi Institute provides engineering, technical and administrative support for the academic members and students. It includes a state-of-theart electronics development group and facilities for mechanical design and construction, as well as computational equipment. Special resources include environmental test equipment, large-scale assembly facilities, computer aided design facilities, etc. This makes possible the design of complex instruments, and the in-house construction of detectors needed for experiments in the laboratory, with high-energy particle accelerators, on high-altitude balloons, and in space on satellites, deep space probes and the space shuttle. Most of the high-energy physics activity is focused on the Fermi National Accelerator Laboratory (http:// www.fnal.gov) ("Fermilab"), one hour's driving distance from the campus, but experiments are also planned and prepared for the LEP/LHC facility at CERN in Geneva, Switzerland. Offices and laboratories for faculty, students, and staff are located in four adjacent buildings, the Laboratory for Astrophysics and Space Research, the High Energy Physics building, the Temporary Astronomy and Astrophysics Center, and parts of the Accelerator Building.

The Enrico Fermi Institute awards Enrico Fermi Postdoctoral Fellowships and McCormick Postdoctoral Fellowships on a worldwide competitive basis to recent Ph.D. recipients in astronomy, chemistry, physics, or planetary sciences. The purpose of these fellowships is to enable young scientists to work either independently or in close association with present members of the Institute in areas of mutual interest. The intellectual life in the Institute is enhanced by frequent visitors, Visiting Scholars and Distinguished Visiting Professors. The Institute also sponsors a popular Saturday morning public lecture series, The Arthur H. Compton Lectures.

Chicago Pile No. 1 (CP-1) was constructed in a makeshift laboratory under the grandstands of Stagg Field Stadium on the University of Chicago campus. It was here that Enrico Fermi and his colleagues achieved the first self-sustaining controlled release of nuclear energy on December 2, 1942. In 1965, the site was designated a registered national historic landmark.



# THE MORRIS FISHBEIN CENTER FOR THE HISTORY OF SCIENCE AND MEDICINE

#### Director

- Robert J. Richards
   Faculty
- Arnold Ira Davidson, Philosophy
- Jan Ellen Goldstein, History
- Adrian Johns, History
- · Karl Matlin, Department of Surgery
- Robert J. Richards, History
- Michael Rossi, History
- Joel M. Snyder, Art History
- Stephen M. Stigler, Statistics
- Russell H. Tuttle, Anthropology
- Alison Winter, History Emeritus Faculty
- Donald N. Levine, Sociology
- William C. Wimsatt, Philosophy

The Morris Fishbein Center for the History of Science and Medicine was inaugurated at the University of Chicago in 1970. Its mission is to facilitate studies in the history of science and medicine by students, post doctoral scholars, and faculty with interest in this field. It lends particular support to Ph.D. students pursuing the history of science. It maintains close cooperative relations with the Department of History and the Committee on the Conceptual and Historical Studies of Science.

Graduate study in the history of science and medicine can lead to a Ph.D. degree through either the Department of History or the Committee on Conceptual and Historical Studies of Science. An extremely flexible program enables students to draw on a wide range of formal courses and seminars. At the same time it is possible to define programs of individual study that can accommodate the specific needs of persons with quite different backgrounds and interests. Arrangements are normally made with science departments when further technical training or supervision seems advisable. Additional training and supervision are available through the co-operation of historians of science and medicine at other universities throughout the nation.

Programs are designed for those who wish to investigate the sciences and medicine in their religious, philosophical, literary and technological contexts, and to relate them to broad questions of social structure and cultural change. Requirements are listed under the Department of History and the Committee on Conceptual and

Historical Studies of Science. Additional information describing the program and the types of financial aid available to students may be obtained on the center's web site: http://fishbein.uchicago.edu/index.html or by writing the Secretary of the Center, 1126 East 59th Street, Chicago, IL 60637 (bethcalderon@uchicago.edu).

#### **COURSES**

A listing of courses representative of those offered by members of the center is available at the CHSS website. (http://chss.uchicago.edu)



### THE JAMES FRANCK INSTITUTE

#### Director

- Aaron Dinner, Chemistry Professors
- Laurie J. Butler, Chemistry
- Cheng Chin, Physics
- Aaron Dinner, Chemistry
- Todd Dupont, Computer Science
- Philippe Guyot-Sionnest, Chemistry
- Eric D. Isaacs, Physics
- Heinrich M. Jaeger, Physics
- Woowon Kang, Physics
- Ka Yee Lee, Chemistry
- Kathryn Levin, Physics
- Donald H. Levy, Chemistry
- Peter B. Littlewood, Physics
- Gene F. Mazenko, Physics
- David A. Mazziotti, Chemistry
- Sidney R. Nagel, Physics
- Thomas F. Rosenbaum, Physics
- Norbert F. Scherer, Chemistry
- Steven J. Sibener, Chemistry
- Dam Thanh Son, Physics
- Dmitri Talapin, Chemistry
- Andrei Tokmakoff, Chemistry
- Gregory A. Voth, Chemistry
- Paul Wiegmann, Physics
- Luping Yu, Chemistry Associate Professors
- Greg Engel, Chemistry
- Margaret Gardel, Physics
- Dion L. Heinz, Geophysical Sciences
- Wendy W. Zhang, Physics Assistant Professors
- David Biron, Physics
- William T. M. Irvine, Physics
- · Michael Levin, Physics
- David Schuster, Physics

- Jonathan Simon, Physics
- Bozhi Tian, Chemistry
- Jonathan Weare, Statistics Emeritus Faculty
- R. Stephen Berry, Chemistry
- Karl F. Freed, Chemistry
- Robert Gomer, Chemistry
- · Leo P. Kadanoff, Physics and Mathematics
- John C. Light, Chemistry
- Stuart A. Rice, Chemistry
- Thomas A. Witten, Physics

#### ABOUT THE INSTITUTE

The James Franck Institute (http://jfi.uchicago.edu) is the premier institute in the U.S. for interdisciplinary research at the intersection of physics, chemistry and materials science. The Institute is home to scientists from condensed matter physics, physical chemistry, synthetic materials chemistry, atomic, molecular, and optical (AMO) physics, geophysics, and biophysics. Most of the faculty in the Institute are also associated with the University of Chicago Materials Research Science and Engineering Center (http://mrsec.uchicago.edu) (MRSEC), supported by the National Science Foundation.

The James Franck Institute was established after World War II as the Institute for the Study of Metals, with the present name being adopted in 1967 to reflect the emerging wider range of research activities covering the full spectrum of solids, liquids, and gases. Today, high-profile experimental and theoretical research in the Institute covers the areas of nanoscience, phase transitions, far-from-equilibrium phenomena, granular materials, low-temperature transport phenomena and superconductivity, ultracold atomic matter, quantum information, electronic structure, hydrodynamics, active matter, biophysics, and networks.

The Institute provides a stimulating environment for scientists of different disciplines to interact and aid each other's research, and it facilitates pre- and postdoctoral researchers working jointly with mentors from different academic backgrounds. The intellectual environment in the Institute is further enriched by Senior Scientists, Senior Research Associates, Research Scientists and Visiting Scholars. Active colloquium and seminar series, as well as a more informal weekly "baglunch", stimulate information exchange. Housed in the Gordon Center for Integrative Science building, the Institute provides office and state-of-the-art laboratory space and operates a number of specialized research facilities. These include a low-temperature (cryogenics) laboratory, materials preparation and spectroscopic facilities, scanning probe and electron microscopes, and extensive shop facilities.

In an age where much cutting-edge research lies at the boundaries between traditional disciplines, the James Franck Institute fosters creative interdisciplinary work at the forefront of science.



## CENTER FOR GENDER AND SEXUALITY STUDIES

#### Faculty Director

- Linda M. G. Zerilli
   Staff
- · Gina Olson, Associate Director
- · Ashly Cargle, Programming Coordinator
- Sarah Tuohey, Student Affairs Administrator Faculty
- Niall Atkinson Art History
- Leora Auslander History
- Shadi Bartsch-Zimmer Classics
- Orit Bashkin Near East Languages & Civilizations
- Lauren G. Berlant English Language & Literature
- Catherine Brekus Divinity
- Bill Brown English Language & Literature
- Margot Browning Humanities
- E. Summerson Carr Social Services Administration
- Mary Anne Case Law
- Tamara Chin Comparative Literature
- Kyeong Hee Choi East Asian Languages & Civilizations
- Hillary Chute English Language & Literature
- Elisabeth Clemens Sociology
- Cathy Cohen Political Science
- Jennifer Cole Comparative Human Development
- Bradin Cormack English Language & Literature
- Raúl Coronado English Language & Literature
- Kristine Culp Divinity
- Jane Dailey History
- Shannon Dawdy Anthropology
- Daisy Delogu Romance Languages & Literature
- Wendy Doniger Divinity
- Sascha Ebeling Near East Languages & Civilizations
- Darby English Art History
- Jean Bethke Elshtain Divinity
- Jacob Eyferth East Asian Languages & Civilizations
- · Martha Feldman Music

- Ping Foong Art History
- Susan Gal Anthropology
- Leela Gandhi English Language & Literature
- Melissa Gilliam Obstetrics and Gynecology
- Jan Ellen Goldstein History
- Ramón Gutiérrez History
- Elaine Hadley English Language & Literature
- James Heckman Economics
- Julia Henly Social Services Administration
- Judy Hoffman Visual Arts
- Rachel Jean-Baptiste History
- Janet H. Johnson Oriental Institute
- · Waldo Johnson Social Services Administration
- Robert L. Kendrick Music
- Janice Knight English Language & Literature
- Don Kulick Comparative Human Development
- Aden Kumler Art History
- Edward O. Laumann Sociology
- Laura Letinsky Visual Arts
- David Levin Germanic Studies
- Jonathan Lyon History
- Agnes Lugo Ortiz Romance Languages & Literatures
- Armando Maggi Romance Languages & Literature
- Rochona Majumdar South Asian Languages & Civilizations
- · Patchen Markell Political Science
- Jeanne Marsh Social Service Administration
- Jill Mateo Comparative Human Development
- Martha K. McClintock Psychology
- Françoise Meltzer Romance Languages & Literatures
- Stuart Michaels Gender Studies
- J. Mark Miller English Language & Literature
- Kathleen Morrison Anthropology
- Deborah Nelson English Language & Literature
- Larry Norman Romance Languages & Literatures
- Martha C. Nussbaum Law
- Wendy R. Olmsted College
- Mark Osadjan Biological Sciences
- Emily Lynn Osborn History
- Tianna Paschel Political Science
- Lucy Pick Divinity

- Melissa Roderick Social Service Administration
- Martha Roth Near Eastern Languages & Civilizations
- Lisa C. Ruddick English Language & Literature
- Julie Saville History
- Jennifer Scappettone English Language & Literature
- Kristen Schilt Sociology
- Reynolds Barton Schultz Humanities
- Bozena Shallcross Slavic Languages & Literatures
- Richard Shweder Comparative Human Development
- Michael Silverstein Anthropology
- William Sites Social Service Administration
- Amy Dru Stanley History
- Christine Stansell History
- Justin Steinberg Romance Languages & Literature
- Richard Allen Strier English Language & Literature
- · Sonali Thakkar English Language & Literature
- Leigh VanValen Ecology & Evolution
- Candace A. Vogler Philosophy
- Linda Waite Sociology
- Martha Ward Art History
- Lisa Wedeen Political Science
- Rebecca West Romance Languages & Literatures
- Jennifer Wild Cinema & Media Studies
- Alison Winter History
- David Wray Comparative Literature
- Wu Hung Art History
- Tara Zahra History
- Judith Zeitlin East Asian Languages & Civilizations
- Linda Zerilli Political Science
- Rebecca Zorach Art History

The Center for the Study of Gender and Sexuality coordinates courses and activities that take up gender and sexuality as primary objects of study and categories of analysis. Courses engage these domains in many different ways, including: the study of gender and/or sexuality as historical practice; scientific concept and site of representation; in social movements such as feminism and gay and lesbian liberation; feminist and queer theory; family structures; the gendering of labor force participation; representations of women in literature and the visual arts; intersections of race and gender, transnationalism; and women's and men's participation in politics.

Our courses fall under traditional disciplinary rubrics, and use gender and sexuality as categories of analysis to track contemporary transformations in these and other domains of knowledge. We are interested in developing points of comparison within and among diverse areas of organized knowledge, not assuming that gender means the same thing in different disciplines, historical moments, epistemologies, or cultural frameworks. We are also dedicated to fostering debate about the construction and implications of categories of gender difference and sexual identity. Further, we promote engagement with ways that gender and sexuality give us insight into other modes of social organization and change, including transformations of economic and political systems; media public spheres; forms of repression and resistance; modes of production, knowledge and experience; and everyday life.

The Center for the Study of Gender and Sexuality confers no graduate degrees at this time. It does, however, offer a graduate certificate in Gender and Sexuality Studies for University of Chicago doctoral students, and it fosters graduate participation in the center in several other ways. In addition to offering undergraduate and graduate courses and an undergraduate major and minor in gender studies, the Center sponsors lectures and symposia of interest to graduate students. It also encourages and supports graduate student initiatives for conferences and speakers, as well as student participation in the governance of the center. In addition, many Gender and Sexuality Studies faculty and students participate in the graduate workshops conducted under the auspices of the Council on Advanced Studies in Humanities and Social Sciences that engage questions of gender, sexualities and identities including the Gender and Sexuality Studies Workshop. Each year, the Center offers a dissertation writing fellowship as well as an office space competition at the Center. Problems in the Study of Gender and Problems in the Study of Sexuality (the core undergraduate courses for the program) and Advanced Theories of Sex and Gender (a graduate level theory course) promote collaborative teaching among faculty and graduate students. The Center also offers graduate student teaching opportunities in the form of free standing courses in the College. A library of textual materials related to the curriculum and the workshops, together with information about gender and women's studies programs at other institutions and funding opportunities for research on women's and gender studies, is kept in the Gender and Sexuality Studies at 5733 S. University Avenue.

The affiliated faculty draws from departments, committees, and professional schools from around the University. Members of this faculty support interdisciplinary work in gender and sexuality studies, even when their major course offerings are not directly gender or sexuality studies courses. Faculty also regularly direct master's theses in the field of gender and sexuality studies within the MAPSS and MAPH programs as well as Ph.D. dissertations in their own departments. Students interested in gender and/or sexuality studies who wish to earn advanced degrees leading to careers in research and teaching should apply for admission to the department in which their chief interest falls.

Please contact Sarah Tuohey, Student Affairs Administrator at the Center for the Study of Gender and Sexuality (773-702-2365; stuohey@uchicago.edu) for specific

information regarding courses and programs. More information can also be found on the Center's website at http://gendersexuality.uchicago.edu/.



#### Human Rights Program

**Faculty Director** 

- Michael Geyer
   Executive Director
- Susan Gzesh

The University of Chicago Human Rights Program, founded in 1997, is currently led by Faculty Director Michael Geyer and Executive Director Susan Gzesh. The Program's research and teaching in human rights integrate exploration of the core questions of human dignity with critical examination of the institutions designed to promote and protect human rights in the contemporary world. The Human Rights Program is an initiative unique among its peers for the interdisciplinary focus and the linkage of theory and practice its faculty and students bring to bear on these essential matters. The HR Program also supports conferences, workshops, lectures, and film series to bring the world to the campus, incorporating the broader community into its educational mission.

The Human Rights Program presents unique opportunities for graduate students within the Chicago tradition of rigorous academic preparation. The Human Rights curriculum includes a core sequence and elective courses which examine human rights from a variety of disciplinary, thematic, and regional perspectives. The Human Rights Program provides support for graduate students in addition to its courses. Graduate students can apply for paid summer internships, for small grants for research support, to work as Teaching Assistants in Human Rights courses, and for grants to create their own Human Rights courses as Graduate Student Lecturers. Graduate students are encouraged to submit papers for presentation at the Human Rights Workshop which has launched a three-year cycle of activities on any one of the following themes: Rights & Duties -- Crisis of Humanitarianism/Humanitarian Crises -- Health & Human Rights -- Human Rights at Home -- Women's Rights are Human Rights.

For more information please see our website: http://humanrights.uchicago.edu



## CENTER FOR INTERNATIONAL STUDIES

#### Interim Director

Mark Lycett

Created in 1966, the Center for International Studies (http://cis.uchicago.edu) (CIS) sponsors and coordinates a wide variety of activities related to research, teaching, curriculum, and public outreach on global and international topics. The Center, which celebrated its 45th anniversary in 2011-12, hosts the Program on the Global Environment and the Undergraduate Program in International Studies.

- The Program on the Global Environment (http://pge.uchicago.edu) (PGE) was officially launched in 2007-08. The program integrates perspectives on key environmental issues coming from the sciences, social sciences, and the policy community. The program includes an undergraduate major and minor in Environmental Studies and a faculty and graduate workshop on the global environment as well as support for internships, research, conferences and other events. Among the innovative offerings of the undergraduate program is the Calumet Quarter (http://pge.uchicago.edu/calumet), a hands-on, intensive field program in the Calumet, Chicago's own back yard.
- The Undergraduate Program in International Studies (http://inst.uchicago.edu) boasts an innovative and rigorous curriculum developed with support from a UISFLP grant (2002-2005). In addition to core and other thematic and areafocused courses, major requirements include foreign language proficiency and study abroad as well as a BA thesis. The major enables undergraduates to take maximum advantage of the impressive range of international studies faculty and resources across departments and divisions of the university.
- CIS sponsors a wide range of public programs from scholarly conferences and workshops to teacher training programs. Our signature series, The World Beyond the Headlines (http://cis.uchicago.edu/wbh), focuses on events of outstanding contemporary importance, bringing an international lineup of scholars, journalists, and world leaders to the Chicago campus.

CIS also serves as a the coordinator for regional studies programs not covered by Department of Education National Resource Centers, including African Studies (https://africanstudies.uchicago.edu) and (with the Centers for Middle East Studies and East European and Russian/Eurasian Studies), Central Eurasian Studies (http://centralasia.uchicago.edu). CIS is also the institutional home of the Committee on Southern Asian Studies (http://southasia.uchicago.edu) (COSAS), a faculty interest group whose members work in South and Southeast Asia. We also work closely with Chicago's area centers: the Centers for East Asian Studies; East European and Russian/Eurasian Studies; Latin American Studies; Middle Eastern Studies; and the South Asian Language and Area Center.

Through its Norman Wait Harris fund (http://cis.uchicago.edu/nwh), CIS supports a wide range of conferences, lectures, invited speakers, and other events on

international topics aimed at both university and broader audiences. In recent years, the Center has utilized new technologies to increase the reach and impact of its programming through its online CHIASMOS (http://chiasmos.uchicago.edu) multimedia content delivery site featuring podcasts and other audio and video feeds of public lectures and other events.



### CENTER FOR JEWISH STUDIES

#### Director

- Joseph Stern, Philosophy Professors
- Leora Auslander, History
- Philip Bohlman, Music
- Ted Cohen, Philosophy
- Arnold I. Davidson, Philosophy, Divinity, and Comparative Literature
- Michael Fishbane, Divinity
- Cornell Fleischer, Near Eastern Languages and Civilizations
- Michael Geyer, History
- David Levin, Germanic Studies
- Françoise Meltzer, Romance Languages and Literatures, Comparative Literature, and Divinity
- Paul Mendes-Flohr, Divinity
- · David Nirenberg, Social Thought and History
- Martha Nussbaum, Law, Philosophy, and Divinity
- Dennis Pardee, Near Eastern Languages and Civilizations
- Moishe Postone, History
- Shulamit Ran, Music
- Martha Roth, Oriental Institute
- Eric Santner, Germanic Studies
- Bożena Shallcross, Slavic Languages and Literatures
- Bernard Wasserstein, History

Associate Professors

- Orit Bashkin, Near Eastern Languages & Civilizations
- · Hakan Karateke, Near Eastern Languages and Civilizations
- James Robinson, Divinity
- David Schloen, Near Eastern Languages and Civilizations
- Tara Zahra, History

**Assistant Professors** 

- Simeon Chavel, Divinity
- Julie Cooper, Political Science
- Na'ama Rokem, Near Eastern Languages and Civilizations
- Anat Schechtman, Philosophy
- Jeffrey Stackert, Divinity
- E. Glen Weyl, Economics

Senior Lecturer

- Ariela Finkelstein, Near Eastern Languages & Civilizations Emeritus
- Howard I. Aronson, Slavic Languages & Literatures
- Menachem Brinker, Near Eastern Languages & Civilizations
- Joel Kraemer, Divinity
- Jerrold Sadock, Linguistics Other Members
- Judith Nadler, Library

Jewish Studies has been an important field of research at The University of Chicago since the days when its first president, the Biblical scholar William Rainey Harper, oversaw the beginnings of programs in Bible and Ancient Near Eastern Civilizations. In addition to Professor Harper, Rabbi Emil Gustav Hirsch taught Jewish Studies from the very founding of the university. In 1892 he was appointed one of the first four full professors at the fledgling university, occupying a chair in "Rabbinical Literature and Philosophy." He held the chair until his death in 1923. In fact, the University of Chicago was one of the first universities in the world to have a full fledged program in Jewish Studies. A few decades later, these early initiatives received a huge institutional boost with the founding of the Oriental Institute, which remains one of the preeminent centers for the study of ancient Near Eastern language, civilization, and archeology. But the flourishing of Jewish Studies over the years at Chicago has also been sustained by appointments in a wide range of departments: professorships of Jewish Hellenism in Classics, Medieval Jewish Philosophy in Philosophy, Jewish Social and Economic History in History, to name only a few. During the past decade, the University has appointed eminent scholars in the study of Hebrew Bible, Midrash, Jewish Medieval Studies, Hebrew Literature, American Jewish Literature, and German Jewish Culture. Working together, they have created one of the most modern comprehensive, distinguished and interdisciplinary programs in Jewish Studies available at any American university. Students can make full use of the resources in Jewish Studies available through the Divinity School, the Departments of Germanic Studies, History, Linguistics, Philosophy, Music, Near Eastern Languages & Literature, and the Oriental Institute.

#### ACADEMIC OPPORTUNITIES

Graduate students in Jewish Studies at the University of Chicago earn their degrees in a department, school, or committee, while supplementing their disciplinary training through participation in the inter-disciplinary activities and scholarship opportunities offered by the Center. Students who wish to pursue graduate work in an area of Jewish Studies should apply to the appropriate department, school, or committee, and not to the Chicago Center for Jewish Studies. The following departments and schools offer specialized graduate study in the following tracks or programs of Jewish Studies:

#### THE DIVINITY SCHOOL

- Biblical Studies
  - Hebrew Bible and the Ancient Near East

- Hebrew Bible and Early Jewish Literature
- Jewish and Christian Bible
- · History of Judaism
- Rabbinic literature, Midrash, and mysticism
- Medieval Jewish philosophy, thought, and literature (including Islamic philosophy)
- Modern Jewish thought and intellectual history
   For information about the Divinity School please visit http://divinity.uchicago.edu.

#### DEPARTMENT OF GERMANIC STUDIES

- German-Jewish Intellectual History
- Yiddish Language, Literature, and Culture
   For information about the Department of Germanic Studies please visit http://german.uchicago.edu.

#### DEPARTMENT OF HISTORY

 Modern Jewish History
 For information about the Department of History please visit http:// history.uchicago.edu.

## DEPARTMENT OF NEAR EASTERN LANGUAGES AND CIVILIZATIONS (NELC)

- Near Eastern Judaica (including Modern Hebrew Studies and Hebrew Studies)
- Northwest Semitic Philology (including Hebrew, Phoenician-Punic, Ugaritic, Aramaic, and Syriac)
- Ancient Near Eastern History (including the ancient history of Syria-Palestine)
- Near Eastern Art and Archaeology
- Modern Hebrew Language and Literature
- Islamic History and Civilization (including the study of Jews in the Islamic world)
- Islamic Thought (including the interaction between Jewish and Islamic thought) For more information about NELC please visit http://nelc.uchicago.edu/.

In addition, students and faculty work in specific areas of Jewish Studies in the Departments of Music, Philosophy, Political Science, and Slavic Languages and Literatures.

The Chicago Center for Jewish Studies seeks to provide a common space in which graduate students of all disciplines working in the diverse areas of Jewish Studies can participate in a rich and lively intellectual community. We are planning interdisciplinary graduate courses, lectures and conferences, and graduate workshops and seminars for faculty and students. The faculty of the Center guide students to the multiple opportunities for the study of Judaism and Jewish culture available across the university. In addition, the Center awards research and travel grants and dissertation year fellowships to students in any department and school working on topics related to Jewish Studies. Prospective and current students should keep in

mind that, given the deeply ingrained interdisciplinary culture of the University of Chicago, their opportunities for study and research can range across the entire faculty in addition to the resources of their home department or unit. Although each program has its own requirements, students typically take courses and seminars in departments other than their own, and dissertation committees often include faculty from multiple departments, thus reflecting the interdisciplinary nature of graduate study at this university.

#### JEWISH STUDIES & HEBREW BIBLE WORKSHOPS

Bringing together faculty and students from across various disciplines, the Jewish Studies and the Hebrew Bible workshops seek to provide a forum for vibrant discourse and critical reflection on work and topics included in these broad fields of Judaica. From Jewish language, literature, and music to religion and philosophy, these workshops look to engage students and faculty interested in Jewish studies while stretching them to think beyond the strictures that currently typify their subdisciplines.

#### THE GRADUATE WORKING GROUP

The goal of the Jewish Studies Working Group is to bring together graduate students across the disciplines with research interests in Jewish Studies. Representing different programs, such interdisciplinary exchange widens the students' perspective on all questions Jewish.

An all-student forum, the working group gives graduate students an opportunity to receive feedback at any stage of their work in a welcoming environment. The format of our meetings can accommodate anything from presenting conference papers and practicing Q&A's, to getting feedback on the development of course papers, grant applications, exam lists, dissertation proposals, dissertation chapters, etc.

#### RESEARCH AND LIBRARY RESOURCES

The University of Chicago library system serves the research and study interests of faculty and students and houses a bound volume and microfilm collection of more than 5 million volumes; a manuscript and archival collection of over 7 million pieces; serial holdings of some 95,000 titles; and a photographic study collection of visual art of more than 500,000 pieces. The physical facilities of the library system consist of the Joseph Regenstein Graduate Research Library, supporting research activities and graduate programs in the humanities and social sciences; Harper Memorial Library, serving primarily students in the College; and six professional and departmental libraries. Regenstein Library provides the central location for research materials in the humanities, the social sciences, and the ancient and modern languages, an array of resources numbering more than 3 million volumes.

Regenstein Library contains the Department of Special Collections, a major repository of archival and rare published materials. Regenstein also houses the Middle East Collection, with rich holdings in Assyriology and Egyptology. Of particular interest to students in Jewish Studies is the unique Ludwig Rosenberger

Collection, which contains thousands of items in German Judaica. In addition, the Oriental Institute maintains extensive holdings in ancient Near Eastern and biblical studies and archaeology.

Library resources are not limited to the University community. The libraries of the cluster of five theological schools in the University neighborhood enrich the available library facilities by more than 1,000,000 volumes. The libraries of the Art Institute and the Chicago Historical Society also contain extensive resources for historical study. The Newberry Library, located on Chicago s Near North Side, is a world-renowned research collection of some 1,000,000 titles and 5,000,000 manuscripts in the humanities, chiefly in history, literature, music, and philosophy, with special strengths in European, American, and Latin American history and literature.

#### STUDENT FUNDING AND OPPORTUNITIES

#### DISSERTATION YEAR FELLOWSHIP

The Chicago Center for Jewish Studies periodically offers Dissertation Year Fellowship(s) for students in all Divisions and Schools at the University of Chicago pursuing projects on any topic relating to Jewish Studies, including (but not restricted to) study of the history, culture, and thought of the Jews, classical and modern Jewish texts, and languages of the Jews (e.g., biblical through modern Hebrew, Yiddish).

#### TRAVEL AND RESEARCH GRANTS

The Chicago Center for Jewish Studies awards grants to students to support their work in any area of Jewish Studies. Eligible expenses include (1) research travel and materials, (2) advanced foreign language study in an accredited program (beyond the level offered at the University), and (3) conference travel and fees. Because funds are currently limited, priority will be given to proposals in the order listed. Students may combine their awards with funding from other sources.

## TEACHING NOMINATIONS TO THE GRAHAM SCHOOL FOR CONTINUING EDUCATION

The Chicago Center for Jewish Studies at the University of Chicago, in cooperation with the Graham School of General Studies, organizes an annual competition for Jewish Studies courses to be taught at the Graham School (at the Gleacher Center). The Graham School offers an array of open enrollment non-credit courses in the liberal arts for adult students; for examples of current courses, see http://grahamschool.uchicago.edu/has. The Center for Jewish Studies oversees three such courses on topics in Jewish Studies, to be taught by University of Chicago Ph.D. students, one in each quarter of the academic year.

Each course meets for a total of 20 hours per quarter; usually they are taught over eight weeks, each meeting lasting 2 ½ hours. Courses are contingent on minimal enrollment (typically six students). Each student teacher will be assigned a faculty mentor who will work with the student on syllabus preparation and oversee student teaching.

## Annual Student-Organized Academic Conference at the University of Chicago

The Center for Jewish Studies funds an annual, one-day conference, organized by graduate students, and held during the academic year. Graduate students submit conference proposals to the Governing Board of the Center one year prior to the proposed conference. The organizers of the winning proposal take responsibility for all aspects of the conference, from contacting speakers to organizing the conference schedule.

For additional information about the Jewish Studies program, please see http://lucian.uchicago.edu/blogs/ccjs/.



## CENTER FOR LATIN AMERICAN STUDIES

#### STAFF

#### Natalie Arsenault | Associate Director

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#### Jamie Gentry | Office Manager, Student Affairs Coordinator

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#### CLAS Website: http://clas.uchicago.edu/

Established in 1968, the Center for Latin American Studies (CLAS) fosters intellectual exchange and innovation in the research and teaching of Latin America at the University of Chicago. CLAS coordinates workshops, seminars and conferences; hosts visiting scholars; and provides financial support for preliminary student field research, library acquisitions, and the development of curricular materials in the less commonly taught languages of the region. In consortium with the University of Illinois at Urbana Champaign, the Center for Latin American Studies has been designated a National Resource Center by the United States Department of Education continuously since 1976. This funding provides a wide range of support, including Foreign Language and Area Studies (FLAS) fellowships. A full description of Latin American Studies programming is available at the Center's website, http://clas.uchicago.edu.

The Center sponsors various activities that contribute to the richness of Latin American Studies at the University of Chicago. The Center sponsors major academic conferences every year, bringing scholars from around the world to examine particular issues in Latin American studies. The Latin American Briefing Series brings renowned figures to campus for public lectures on current affairs in Latin America.

The Center for Latin American Studies administers a Master of Arts degree program in Latin American Studies. For details on the Master of Arts in Latin American Studies, please see the entries under either Social Sciences Master of Arts Programs or Humanities Master of Arts Programs.

The Center also administers a Joint A.M./M.B.A. degree and a dual A.M. in Latin American Studies/A.M. in Public Policy. The Joint A.M./M.B.A. is administered through the Division of Social Sciences and the Booth School of Business. Students take an integrated program of fourteen courses in the business school and nine in Latin American studies. Applicants submit a single application to the joint program through the Booth School of Business (the business school accepts applications for

autumn quarter only). Business School students may choose to apply to the joint program during their first quarter of residence. The two degrees can be attained in three years or less, depending on the student's previous training. The dual A.M. in Latin American Studies/A.M. in Public Policy is administered through the Divisions of Social Sciences or Humanities and the Harris School of Public Policy Studies. Students take the one-year A.M. in Latin American Studies, and during the fall quarter apply to matriculate into the Harris School the following academic year. In the second year, students complete a nine-course A.M. in Public Policy, and graduate at the end of two years with a dual A.M. in Latin American Studies and in Public Policy Studies.

### AFFILIATED FACULTY

#### Director

- Mauricio Tenorio, Department of History Faculty
- Michael Albertus Department of Political Science
- Fernando Alvarez Department of Economics
- Dain Borges Department of History
- Claudia Brittenham Department of Art History
- Chad Broughton Department of Public Policy Studies (College)
- Melvin Butler Department of Music
- Shannon Dawdy Department of Anthropology
- Frederick A. de Armas Department of Romance Languages & Literatures
- René de Costa Department of Romance Languages & Literatures
- Brodwyn Fischer—Department of History
- Cécile Fromont Department of Art History
- Ramón Gutiérrez Department of History
- Susan R. Gzesh Department of Human Rights
- James Heckman Department of Economics
- Thomas Holt Department of History
- Dwight Hopkins Divinity School
- Robert L. Kendrick Department of Music
- Alan Kolata Department of Anthropology
- Emilio H. Kourí Department of History
- Benjamin Lessing Department of Political Science
- Ana Maria Lima Department of Romance Languages & Literatures
- Victor Lima Department of Economics
- Hedibert Lopes Booth School of Business
- Maria Cecilia Lozada Department of Romance Languages & Literatures
- John A. Lucy Department of Comparative Human Development

- Agnes Lugo Ortiz Department of Romance Languages & Literatures
- Alfredo Cesar Melo Department of Romance Languages & Literatures
- · Alicia Menendez Harris School of Public Policy
- Salikoko Mufwene Department of Linguistics
- Stephan Palmié Department of Anthropology
- Tianna Paschel Department of Political Science
- Mario Santana Department of Romance Languages & Literatures
- Julie Saville Department of History
- Paul Sereno Department of Organismal Biology & Anatomy
- · Alberto Simpser Department of Political Science
- Karl Swinehart Harper-Schmidt Postdoctoral Fellow
- Robert M. Townsend Department of Economics
- E. Glen Weyl Department of Economics

\*For a continually updated list of course offerings, please visit the Center for Latin American Studies webpage (http://maclas.uchicago.edu/page/courses) or the University of Chicago Time Schedules. (http://timeschedules.uchicago.edu)

#### LATIN AMERICAN & CARIBBEAN STUDIES COURSES

# LACS 30401. Intensive Study of a Culture: Lowland Maya History and Ethnography. 100 Units.

The survey encompasses the dynamics of first contact; long-term cultural accommodations achieved during colonial rule; disruptions introduced by state and market forces during the early postcolonial period; the status of indigenous communities in the twentieth century; and new social, economic, and political challenges being faced by the contemporary peoples of the area. We stress a variety of traditional theoretical concerns of the broader Mesoamerican region stressed (e.g., the validity of reconstructive ethnography; theories of agrarian community structure; religious revitalization movements; the constitution of such identity categories as indigenous, Mayan, and Yucatecan). In this respect, the course can serve as a general introduction to the anthropology of the region. The relevance of these area patterns for general anthropological debates about the nature of culture, history, identity, and social change are considered.

Instructor(s): J. Lucy Terms Offered: Autumn

Note(s): Not offered 2013-14

#### LACS 30603. Image and Text in Mexican Codices. 100 Units.

,In most Mesoamerican languages, a single word describes the activities that we would call "writing" and "painting." This seminar will investigate the interrelationships between image and text in Central Mexico both before and immediately after the introduction of alphabetic writing in the 16th century. We will also review art historical and archaeological evidence for the social conditions of textual and artistic production in Mexico, and how these traditions were transformed under Spanish colonial rule. We will consider the materiality of text and image by working with facsimiles of Mesoamerican books in the Special Collections of the Regenstein Library. At the end of the course, students will have acquired a basic literacy in Aztec and Mixtec writing systems, and will have refined their ability to look productively and write elegantly about art.

Instructor(s): C. Brittenham Terms Offered: Spring

Equivalent Course(s): ARTH 20603, ARTH 30603, LACS 20603

#### LACS 31700. Slavery and Unfree Labor. 100 Units.

This course offers a concise overview of institutions of dependency, servitude, and coerced labor in Europe and Africa, from Roman times to the onset of the Atlantic slave trade, and compares their further development (or decline) in the context of the emergence of New World plantation economies based on racial slavery. We discuss the role of several forms of unfreedom and coerced labor in the making of the "modern world" and reflect on the manner in which ideologies and practices associated with the idea of a free labor market supersede, or merely mask, relations of exploitation and restricted choice.

Instructor(s): S. Palmié Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 22205, ANTH 31700, CRES 22205, LACS 22205

# LACS 31900. ¿Cuerpos Desechables? Estéticas de la No-Vida en las Literaturas Hispanoamericanas (de la Conquista al siglo XXI) 100 Units.

In this seminar we will conduct a theoretical exploration of the aesthetic procedures through which human life has been represented as expendable in Spanish-American literature from the Conquest to the twenty-first century, as well as an examination of the historical and philosophical contexts within which such figurations emerged. The course will focus on case studies that correspond to four key moments in the history of the region: conquest and colonization, slavery and the formation of national states in the nineteenth century, the triumph of a capitalist export economy at the turn of the twentieth, and the violent challenges posed by globalization and narcotráfico in the contemporary context. Among the issues and texts we may engage are Fray Bartolomé de las Casas and Francisco de Vitoria's sixteenth-century dispute on the right of conquest and the *Brevísima relación de la destrucción de las Indias*, Esteban Echevarría's *El matadero*, Lucio Mansilla's *Una excursión a los indios ranqueles*, Juan F. Manzano's *Autobiografía de un esclavo*, Manuel Zeno Gandía's *La charca*, and Fernando Vallejo's *La virgen de los sicarios*.

Instructor(s): A. Lugo-Ortiz Terms Offered: Spring

#### LACS 32501-32502-32503. Elementary Haitian Kreyol I-II-III.

This 3 course sequence will provide students with an in-depth study of the Haitian Kreyol language in its modern context, with emphasis on developing students' proficiency in speaking and writing, and in listening and reading comprehension. The course will also provide necessary cultural and historical context.

#### LACS 32501. Elementary Haitian Kreyol I. 100 Units.

Instructor(s): Lecturer Terms Offered: Autumn

Equivalent Course(s): LACS 22501

#### LACS 32502. Elementary Haitian Kreyol II. 100 Units.

Terms Offered: Winter

Equivalent Course(s): LACS 22502

#### LACS 32503. Elementary Haitian Kreyol III. 100 Units.

Terms Offered: Spring

Equivalent Course(s): LACS 22503

#### LACS 32502. Elementary Haitian Kreyol II. 100 Units.

Terms Offered: Winter

Equivalent Course(s): LACS 22502

#### LACS 32503. Elementary Haitian Kreyol III. 100 Units.

Terms Offered: Spring

Equivalent Course(s): LACS 22503

#### LACS 34130. The Production of the Artist. 100 Units.

This course will develop a conversation about what constitutes the image of the contemporary artist. Written exercises will contribute to the development of the problem of how one produces oneself as an artist. The history of dematerialization in art practice from the 1960's, and the discussion of globalization that emerged in the 1980's will be brought to bear. How is the role and identity of the artist constructed in relation to various histories and to the prevailing movements of the moment such as institutional critique and relational aesthetics? This course is open to students of all disciplines who are interested in how the artist is constructed, not only as role or identity, but as a production site.

Instructor(s): R. Basbaum Terms Offered: Autumn

Equivalent Course(s): ARTV 34130, LACS 24130, ARTV 24130

#### LACS 34512-34513-34514. Intermediate Haitian Kreyol I-II-III.

This 3 course sequence will enhance students' understanding of Haitian Kreyol with continued study of the language in its modern context, with emphasis on developing students' proficiency in speaking, writing, listening, and reading comprehension at an intermediate level.

#### LACS 34512. Intermediate Haitian Kreyol I. 100 Units.

Terms Offered: Autumn

Equivalent Course(s): LACS 24512

#### LACS 34513. Intermediate Haitian Krevol II. 100 Units.

Terms Offered: Winter

Equivalent Course(s): LACS 24513

#### LACS 34514. Intermediate Haitian Kreyol III. 100 Units.

Terms Offered: Spring

Equivalent Course(s): LACS 24514

#### LACS 34513. Intermediate Haitian Kreyol II. 100 Units.

Terms Offered: Winter

Equivalent Course(s): LACS 24513

#### LACS 34514. Intermediate Haitian Kreyol III. 100 Units.

Terms Offered: Spring

Equivalent Course(s): LACS 24514

#### LACS 34600-34700-34800. Introduction to Latin American Civilization I-II-III.

Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies. This sequence is offered every year. This course introduces the history and cultures of Latin America (e.g., Mexico, Central and South America, and the Caribbean Islands).

#### LACS 34600. Introduction to Latin American Civilization I. 100 Units.

Autumn Quarter examines the origins of civilizations in Latin America with a focus on the political, social, and cultural features of the major pre-Columbian civilizations of the Maya, Inca, and Aztec. The quarter concludes with an analysis of the Spanish and Portuguese conquest, and the construction of colonial societies in Latin America.

Terms Offered: Autumn

Equivalent Course(s): LACS 16100,ANTH 23101,CRES 16101,HIST 16101,HIST 36101.SOSC 26100

#### LACS 34700. Introduction to Latin American Civilization II. 100 Units.

Winter Quarter addresses the evolution of colonial societies, the wars of independence, and the emergence of Latin American nation-states in the changing international context of the nineteenth century.

Terms Offered: Winter

Equivalent Course(s): ANTH 23102, CRES 16102, HIST 16102, HIST 36102, LACS 16200, SOSC 26200

#### LACS 34800. Introduction to Latin American Civilization III. 100 Units.

Spring Quarter focuses on the twentieth century, with special emphasis on the challenges of economic, political, and social development in the region.

Terms Offered: Spring

Equivalent Course(s): ANTH 23103,CRES 16103,HIST 16103,HIST 36103,LACS 16300,SOSC 26300

#### LACS 34700. Introduction to Latin American Civilization II. 100 Units.

Winter Quarter addresses the evolution of colonial societies, the wars of independence, and the emergence of Latin American nation-states in the changing international context of the nineteenth century.

Terms Offered: Winter

Equivalent Course(s): ANTH 23102,CRES 16102,HIST 16102,HIST 36102,LACS

16200,SOSC 26200

#### LACS 34800. Introduction to Latin American Civilization III. 100 Units.

Spring Quarter focuses on the twentieth century, with special emphasis on the challenges of economic, political, and social development in the region. Terms Offered: Spring

Equivalent Course(s): ANTH 23103,CRES 16103,HIST 16103,HIST 36103,LACS 16300,SOSC 26300

#### LACS 35011. Africa, America. 100 Units.

This seminar explores the dynamic exchanges in the expressive cultures of Africa and the Americas. It examines a range of visual and material traditions that emerged and grew from the sustained contact between the two continents from the era of the Atlantic Slave Trade to the present. Class discussion, readings, assignments, and museum visits address topics such as carnival performances, santería and candomblé traditions, Vodou ritual forms, Luso-African architecture on both continents, and contemporary art.

Instructor(s): C. Fromont Terms Offered: Winter

Equivalent Course(s): ARTH 25011, ARTH 35011, LACS 25011

#### LACS 36201. Race, Ethnicity and Politics in Comparative Perspective. 100 Units.

The primary objective of this course is to offer a comparative approach to understanding the relationship between race, inequality, and politics. It focuses primarily on examples from Latin America and the United States, and is organized in three sections. In the first, we explore the relationship between capitalist expansion, the modern-nation, state and the socio-historical construction of "race". In the second section, we explore differences in political elites' approaches to the question of race in the period of nation building. We discuss how different ethnoracial groups were incorporated into, or excluded from, the nation both through legal institutions and nationalist ideologies. In the final section, we analyze the emergence of black and indigenous social movements as a critical response to the failure of the nationalist project. Throughout the course we analyze the different ways race, ethnicity, and identity are understood in these distinct contexts, and also explore how race intersects with other axes of power, such as class and gender. (C) Instructor(s): T. Paschel Terms Offered: Autumn

Equivalent Course(s): PLSC 36201

#### LACS 36304. Literature and Society in Brazil. 100 Units.

This course surveys the relations between literature and society in Brazil, with an emphasis on the institution of the novel in the nineteenth and early twentieth centuries. The nineteenth-century Brazilian novel, like the Russian novel, was an arena in which intellectuals debated, publicized, and perhaps even discovered social questions. We will examine ways in which fiction has been used and misused as a historical document of slavery and the rise of capitalism, of race relations, of patronage and autonomy, and of marriage, sex, and love. We will read works in translation by Manuel Antonio de Almeida, Jose de Alencar, Machado de Assis, Aluisio de Azevedo, and others.

Instructor(s): D. Borges Terms Offered: Spring

Equivalent Course(s): LACS 26304, HIST 36304, HIST 26304

#### LACS 36602. Brazilian Literature and Cinema. 100 Units.

In this class, we will discuss the intricate and complex relationship between literature and film in Brazilian culture. Should film adaptations be faithful to the novels by which they were inspired? Should such films be regarded as interpretations of the original text or should they be evaluated as an autonomous cultural production? What role do they play in the process of canonization of a literary work? Those are questions that we will try to answer throughout the quarter.

Instructor(s): A. Melo Terms Offered: Autumn

Note(s): All the books will be available in English. Taught in English with an additional weekly session in Portuguese for students seeking Portuguese credit. Equivalent Course(s): PORT 36502,LACS 26602,PORT 26502

#### LACS 36802. Bunuel and Surrealism. 100 Units.

Description forthcoming.

Instructor(s): Jim Lastra Terms Offered: Winter

Equivalent Course(s): CMST 26802, LACS 26802, CMST 36802

#### LACS 37004. Lusophone Postcolonial Studies. 100 Units.

The main goal of this seminar is to discuss the specificities and predicaments of Lusophone Postcolonial Studies. In what sense can Portuguese colonialism be compared to its British and French counterparts? What was the role played by Brazil in the relation between Portugal and Lusophone Africa? (Did Brazil represent a model to be followed by African anti-colonial intellectuals in their search for political and cultural independence? Or was Brazil complicit with Portuguese colonialism?) How should we account for this kind of South-South relationship between Brazil and Lusophone African countries? These are the questions we will address in this seminar.

Instructor(s): A. Melo Terms Offered: Autumn

Note(s): Taught in English with an additional weekly session in Portuguese for students seeking Portuguese credit.

Equivalent Course(s): PORT 37000, LACS 27004, PORT 27000

#### LACS 39503. Mexican Murals. 100 Units.

This course examines three vital moments of mural production in Mexico: ancient, colonial, and modern. We will begin by looking at indigenous Mesoamerican wall painting traditions of Teotihuacan, the Maya, Cacaxtla, and the Aztecs, and then consider how these traditions were transformed by the encounter with Spanish colonialism to provide decoration for the walls of monastic churches. Finally, we will examine the modern Mexican muralist movement, looking at the work of Diego Rivera, José Clemente Orozco, David Alfaro Siqueiros, and others, with a particular focus on Rivera's murals at the Detroit Institute of Arts. Throughout the course, we will consider mural paintings in relationship to architecture and other media, paying special attention to the different methodologies and kinds of evidence that have been used to interpret these works. The course will also focus on developing research, writing, and presentation skills.

Instructor(s): C. Brittenham Terms Offered: Winter

Equivalent Course(s): ARTH 39503, LACS 29503, ARTH 29503

#### LACS 40100. Reading and Research in Latin American Studies. 100 Units.

Terms Offered: Autumn, Winter, Spring, Summer

Prerequisite(s): Consent of faculty supervisor and program adviser

Note(s): Students are required to submit the College Reading and Research Course

Form. Typically taken for a quality grade.

Equivalent Course(s): LACS 29700

#### LACS 40300. MA Paper Pre: Latin American Studies. 100 Units.

Terms Offered: Autumn, Winter, Spring, Summer Prerequisite(s): Instructor Consent required

#### LACS 40305. The Inka and Aztec States. 100 Units.

This course is an intensive examination of the origins, structure, and meaning of two native states of the ancient Americas: the Inka and the Aztec. Lectures are framed around an examination of theories of state genesis, function, and transformation, with special reference to the economic, institutional, and symbolic bases of indigenous state development. This course is broadly comparative in perspective and considers the structural significance of institutional features that are either common to or unique expressions of these two Native American states. Instructor(s): A. Kolata Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 20100, ANTH 40100, LACS 20100

#### LACS 40501. MA Proseminar. 100 Units.

Required course for the master's in Latin American Studies degree program. Students will gain an introduction to the variety of disciplinary approaches, discourses, and foci that fall under the large rubric of Latin American Studies. The proseminar introduces students to specialists in the field at the University of Chicago and to the research and investigation in which they are involved. Open only to program students.

Terms Offered: Autumn

#### LACS 42500. Anthropology of the Afro-Atlantic World. 100 Units.

Although originally pioneered, more than three generations ago, by scholars and critics such as C.L.R. James, Eric Williams, W.E.B. DuBois, or Walter Rodney, conceptions of an "Atlantic World" have only recently come to prominence in Anthropology. In the past decade, however, students of Africa and the Americas have increasingly begun to phrase their inquiries in terms transcending entrenched geographical divisions of labor within the social sciences, aiming to include Africa, the Americas, and, to a certain extent, Europe into a single analytic field. Parts of this course will be devoted to a concise introduction to some of the major theoretical positions within, and controversies surrounding the new "Atlantic" anthropology of Africa and its New World diasporas. After this, we will examine a number of recent monographs and/or major articles exemplifying the promises and pitfalls of theoretical conceptions and methodological procedures that attempt to go beyond mere transregional comparison or linear historical narratives about "African influences", and aim at analytically situating specific ethnographic or historical scenarios within integrated perspectives on an "Afro-Atlantic World". Instructor(s): S. Palmié.

Equivalent Course(s): ANTH 42500

#### LACS 44612. Political Economy of Corruption and Development. 100 Units.

This course is a graduate-level seminar covering recent theoretical and empirical research, organized around the following questions. First, what are the consequences of corruption for socio-economic development? Does corruption help or hinder it? Second, what are the causes of corruption? Is corruption affected by political and economic institutions, regime type, bureaucracy, resource endowments, or culture? Third, why has corruption varied over time within a country or state? On the empirical side, the course will emphasize issues of measurement and inference: how can one draw reliable conclusions about these questions, and what are the pitfalls along the way? The empirical readings encompass qualitative, quantitative, observational, and experimental approaches. (C)

Instructor(s): A. Simpser Terms Offered: Spring

Equivalent Course(s): PLSC 44612

#### LACS 47814. Advanced Seminar in Mesoamerican Linguistics. 100 Units.

Instructor(s): John Lucy Terms Offered: Autumn, Winter, Spring

# LACS 47901-47902-47903. Beginning Modern Spoken Yucatec Maya I; Modern Spoken Yucatec Maya II; Beginning Modern Spoken Yucatec Maya III.

This course is a basic introduction to the modern Yucatec Maya language, an indigenous American language spoken by about 750,000 people in southeastern Mexico. Three consecutive quarters of instruction are intended for students aiming to achieve basic and intermediate proficiency. Students receiving FLAS support must take all three quarters. Others may elect to take only the first quarter or first two quarters. Students wishing to enter the course midyear (e.g., those with prior experience with the language) must obtain consent of instructor. Materials exist for a second year of the course; interested students should consult the instructor. Students wishing to continue their training with native speakers in Mexico may apply for FLAS funding in the summer.

#### LACS 47901. Beginning Modern Spoken Yucatec Maya I. 100 Units.

Instructor(s): John Lucy

Equivalent Course(s): CHDV 27901, CHDV 47901, LACS 27901

#### LACS 47902. Modern Spoken Yucatec Maya II. 100 Units.

Instructor(s): John Lucy Terms Offered: Winter

Equivalent Course(s): LACS 27902

#### LACS 47903. Beginning Modern Spoken Yucatec Maya III. 100 Units.

Instructor(s): J. Lucy

Equivalent Course(s): CHDV 27903, CHDV 47903, LACS 27903

#### LACS 47902. Modern Spoken Yucatec Maya II. 100 Units.

Instructor(s): John Lucy Terms Offered: Winter

Equivalent Course(s): LACS 27902

#### LACS 47903. Beginning Modern Spoken Yucatec Maya III. 100 Units.

Instructor(s): J. Lucy

Equivalent Course(s): CHDV 27903, CHDV 47903, LACS 27903

#### LACS 60302. Colloquium: Immigration and Assimilation. Units.

This course explores the history of immigration in what is now the United States, starting with the colonial origins of Spanish, French, Dutch and English settlements, the importation of African slaves, and the massive waves of immigrants that arrived in the nineteenth and twentieth century. Additionally, we will study the adaptation of these immigrants, exploring the validity of the concept of assimilation, comparing and contrasting the experiences of the "Old" and "New" immigrants based on their race, religion, and class standing.

Instructor(s): R. Gutierrez Terms Offered: Autumn Equivalent Course(s): HIST 60302,GNSE 60300



# CENTER FOR MIDDLE EASTERN STUDIES

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- John Mearsheimer
- Robert Pape
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- Lisa Wedeen

Slavic Languages and Literatures

Victor Friedman
 South Asian Languages and Civilizations

· Muzaffar Alam

Since its establishment in 1965, the mandate of the Center for Middle Eastern Studies has been to coordinate, stimulate, and encourage academic, extracurricular, and outreach activities relating to the study of North Africa, Western Asia, Central Asia, and the Islamic World.

In fulfillment of this mission, the Center funds and administers a wide variety of programs and projects. At the undergraduate level, CMES ensures the availability of elementary and intermediate language courses and seeks to enhance their quality. In addition, CMES has taken the lead in helping to develop new non language courses in the College. The Center is a designated National Resource Center funded by the Department of Education; this funding includes Foreign Language and Area Studies (FLAS) fellowships. Graduates of the doctoral programs in Middle Eastern studies at Chicago continue to achieve recognition nationally and to find placement in the finest institutions of higher learning in the United States and abroad. The Center coordinates and sponsors a lecture series, several film series, current events forums and the student organized and administered Middle East History and Theory Workshop and Conference. Finally, the ultimate goal is to produce American experts in and citizens knowledgeable about the Middle East, its languages, and international affairs, as well as to build and maintain a strong research base in these areas.

The Center administers two joint programs through the Division of the Social Sciences, Chicago Booth School of Business, and the Harris School of Public Policy Studies. Students interested in this option should refer to the Social Sciences Announcement for further details.

The Center also administers an interdisciplinary Master of Arts program in Middle Eastern Studies. For information on the M.A. program, please see the entries under either the Social Sciences or the Humanities Master of Arts programs.

Virtually all the disciplines in the humanities and social sciences are represented in Middle East programs of study. Ten languages of the ancient Middle East are taught and 12 of the classical and modern periods. Most of the distinguished faculty hold appointments in one or more departments or schools. The interdisciplinary, comparative, and innovative approaches to knowledge and learning pioneered at Chicago profoundly inform the language and area studies programs at the University. This feature of the curriculum has been significantly strengthened by the creation of the Foreign Language and Area Studies Council under the aegis of the Center for International Studies. Research in all spheres is powerfully supported by one of the finest library collections in North America.

Long a national model, the CMES public education program provides materials and services to educators, schools, community groups and cultural institutions, healthcare providers, businesses, and the media. To achieve this objective of service to the community most efficiently, we seek partnerships with likeminded organizations whose aims are consistent with our own goals of enhancing Americans' understanding of the nation's global connections and its multicultural society through education and training on the Middle East and the Islamic World.



## INSTITUTE FOR Molecular Engineering

## Graduate Program in Molecular Engineering

#### Director

Matthew Tirrell

#### **Professors**

David Awschalom Andrew Cleland (from July 1, 2014) Juan J. de Pablo Paul Nealey

#### Website

http://molecularengineering.uchicago.edu/

The Institute of Molecular Engineering is at the forefront of an emerging field. This exciting new field involves the incorporation of synthetic molecular building blocks including electronic, optical, mechanical, chemical, and biological components into functional systems that will impact technologies from advanced medical therapies to quantum computing. The institute is the largest new academic endeavor that the University has taken on since the founding of the University of Chicago Harris School of Public Policy in 1988.

The Institute of Molecular Engineering (IME) was created by the University of Chicago, in partnership with Argonne National Laboratory (http://www.anl.gov), which brings leading scientists and engineers and world-class facilities to the endeavor, including the Advanced Photon Source (http://www.aps.anl.gov), the Argonne Leadership Computing Facility (http://www.alcf.anl.gov) and the Center for Nanoscale Materials (http://nano.anl.gov).

In May 2013, the University of Chicago's Council of the University Senate approved the Institute for Molecular Engineering's PhD program, thus launched the first engineering graduate program in the history of the University of Chicago.

The Institute for Molecular Engineering welcomes students with diverse academic backgrounds, including all fields of physical, biological and computational sciences, to join in the quest for breakthrough scientific discoveries and technological advancements addressing the world's most pressing problems. The applicant for the Ph.D. program should have a bachelor's degree in a STEM field, and should provide scores for the GRE general test and the TOEFL (if not a native English speaker). The relevant GRE subject test scores will be considered if submitted, and could strengthen an application, but are not strictly required. Please submit a personal

statement of research interests, three recommendation letters, transcript(s) from all undergraduate institutions, as well as a \$50 application fee.

#### DEGREE REQUIREMENTS

Graduate students entering the IME Ph.D. program are expected to fulfill a set of course requirements including 3 core courses, 4 in-depth courses in the research field of choice and 2 broad elective courses. The core and in-depth courses are selected from a portfolio of graduate level courses, in conjunction with the faculty advisor. These courses are offered by the IME, sister departments (Physics, Chemistry, Biophysics, Computer Science and Biological Sciences) or developed specifically for IME students. The broad electives are to provide students with the opportunity to acquire skills in leadership, communication, technology development and product design. The hallmark of IME's Ph.D. program is a highly customized curriculum tailored to each individual student's needs and inspirations. In addition, there are a wide variety of opportunities for students to engage in teaching.

The vibrant and diverse research activities pursued by IME faculty members offer students a very broad range of research opportunities. First-year students are encouraged to explore these opportunities by participating in the IME Forum, an annual poster fair showcasing IME research activities and by establishing relationships with individual faculty members. As the institute works in a highly interdisciplinary environment, there are many opportunities to work with multiple faculty members within the institute and/or with faculty in other partner institutes in the University of Chicago and Argonne National Laboratory (see our website (http://molecularengineering.uchicago.edu) for a full list). Every effort will be made to facilitate matching of each student with an advisor by the end of the first quarter.

To establish candidacy, students are required to develop a research proposal describing the objectives, approaches and expected outcomes of their Ph.D. thesis work. Students will give an oral presentation of their written proposal to a faculty review committee for approval. This process should be completed no later than the end of second academic year.

All students will receive scholarship support from the Institute for the first quarter. Subsequently, IME provides full financial support to all graduate students throughout their graduate study at IME as long as they remain good standing.

The IME adopts the residency requirement of the University of Chicago as a part of the degree requirements.

#### MOLECULAR ENGINEERING, INSTITUTE FOR COURSES

MENG 49900. Research: Molecular Engineering. VAR Units. Instructor(s): Staff Terms Offered: Summer, Autumn, Winter, Spring



#### NORC

#### NORC at the University of Chicago

NORC at the University of Chicago is an independent, not for profit research organization that has been affiliated with the University for more than fifty years. Headquartered in downtown Chicago with additional offices on the University of Chicago campus, in the D.C. Metro area, Atlanta, Boston, and San Francisco, NORC also supports a nationwide field staff as well as international research operations. With clients throughout the world, NORC collaborates with government agencies, foundations, education institutions, nonprofit organizations, and businesses to provide data and analysis that support informed decision making in key areas including health, education, crime, justice, energy, security and the environment. NORC's decades of leadership and experience in data collection, analysis, and dissemination—coupled with deep subject matter expertise—provides the foundation for effective solutions to issues facing society.

NORC has pioneered methodological investigations which advance the science of survey research and maintains an active presence in the research and teaching life of the Divisions of the Social Sciences and Biological Sciences, as well as the Pritzker School of Medicine, the Harris Graduate School of Public Policy Studies, and the School of Social Service Administration.

NORC conducts nationwide surveys that are used as data resources for social scientists and policy analysts throughout the world. It employs a field staff of over 1,000 trained interviewers and conducts more than 30 surveys each year on such topics as the costs and practices of health care, environmental studies, substance abuse, education, labor, family, and the attitudes of Americans. NORC has been conducting the General Social Survey (GSS) since 1972; the GSS is the most frequently used dataset in sociology aside from the U.S. Census.

In addition to its core research departments (Economics, Labor, and Population Studies; Education and Child Development Studies; Health Care Research; International Projects; Public Health Research; Security, Energy, and Environment; Substance Abuse, Mental Health, and Criminal Justice Studies and: Statistics and Methodology), NORC is also the home to seven academic research centers. The Academic Research Centers occupy two floors of recently renovated, green offices in the Harris School building on the University campus. The Centers provide a collegial, interdisciplinary environment in which University of Chicago faculty can conduct social science research. The seven centers are:

**The Population Research Center,** funded by the National Institute of Child Health and Human Development, facilitates interdisciplinary population research by economists, sociologists, and other population sciences from the University.

The Cultural Policy Center (CPC) is a nationally recognized, joint initiative of the Harris School of Public Policy Studies and NORC and is dedicated to researching and understanding the most significant issues affecting arts and culture from a range of interdisciplinary perspectives.

The Center on Demography and Economics of Aging is funded by the National Institute on Aging. Like the Population Research Center, faculty Research Associates come from across the University community, with members housed in the Division of Social Sciences, the Harris School of Public Policy, the Graduate School of Business and the Pritzker Medical School, as well as other University units.

The Ogburn-Stouffer Center for the Study of Social Organizations promotes innovative, theoretically-informed, empirical research on population, political attitudes and decision making, community, health, social inequality, and social structure. A core mission is to promote the training of graduate students in the social sciences through involvement in all phases of large-scale survey research from development to execution and analysis.

Two other centers are the **Center for the Study of Politics and Society**, which houses the GSS, and the **Joint Center for Education Research**. The Joint Center coordinates research activities with the University of Chicago faculty from the Committee on Education and other academic units as well as with education researchers at research institutes affiliated with the University of Chicago.

The Center for Advancing Research and Communication (ARC) in STEM (science, technology, engineering and math) is a National Science Foundation funded initiative that supports education research focusing on core scientific questions about learning in science, technology, engineering and mathematics. ARC investigators conduct research and provide technical assistance in support of over 300 STEM investigators across the U.S. funded by NSF's Research and Evaluation on Education in Science and Engineering (REESE) program as they work to improve education policy, instruction, and learning, in and outside of formal classroom settings

University students participate in NORC's activities in several ways. NORC offers a summer intern program open to graduate and undergraduate students. In addition, some students are hired by faculty members as research assistants; some are provided support through NORC for their own research in the writing of dissertations; many attend conferences and weekly workshops that are sponsored by and held at NORC. NORC employs many University graduates at professional career levels



# COMMITTEE ON SOUTHERN ASIAN STUDIES/SOUTH ASIA LANGUAGE & AREA CENTER

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- Leela Gandhi, English
- Jason Grunebaum, South Asian Languages & Civilizations
- Isa Hussin, Political Science
- Ronald B. Inden, History Emeritus
- Matthew Kapstein, Divinity
- John D. Kelly, Anthropology
- Alan Kolata, Anthropology
- Nisha Kommattam, South Asian Languages & Civilizations
- Spencer Leonard, Harper-Schmidt, College
- James Lindholm, South Asian Languages & Civilizations
- Mark Lycett, Anthropology

- Rochona Majumdar, South Asia Languages & Civilizations
- McKim Marriott, Anthropology Emeritus
- Colin P. Masica, South Asian Languages & Civilizations Emeritus
- Kaley Mason, Music
- William Mazzarella, Anthropology
- · Kathleen Morrison, Anthropology
- Choudhri M. Naim, South Asian Languages & Civilizations Emeritus
- Constantine Nakassis, Anthropology
- Karma Ngodup, South Asian Languages & Civilizations
- Ralph W. Nicholas, Anthropology Emeritus
- Martha Nussbaum, Law
- James H. Nye, Library
- Emily Oster, Booth School
- Poornima Paidipaty, Harper-Schmidt, College
- Tahera Qutbuddin, Near East Languages & Civilizations
- Frank E. Reynolds, Divinity Emeritus
- · Laura Ring, Library
- Lloyd I. Rudolph, Political Science Emeritus
- Susanne Hoeber Rudolph, Political Science Emerita
- John Schneider, Medicine
- Clinton B. Seely, South Asian Languages & Civilizations Emeritus
- · Richard Shweder, Human Development
- Daniel Slater, Political Science
- Paul Staniland, Political Science
- Ulrike Stark. South Asian Language & Civilizations
- Kaushik Sundar Rajan, Anthropology
- Richard P. Taub, Comparative Human Development
- · Gary Tubb, South Asian Languages & Civilizations
- · Christian Wedemeyer, Divinity
- Norman H. Zide, South Asian Languages & Civilizations Emeritus Affiliates: Faculty and Emeritus Faculty
- Paul Friedrich, Anthropology Emeritus
- Heshmat Moayyad, Near Eastern Languages & Civilizations
- John Perry, Near Eastern Languages & Civilizations Emeritus
- John E. Woods, History

The University of Chicago is one of the leading centers for the study of Southern Asia. Countries in which we have scholarly expertise include in South Asia, Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka, and Tibet (as an autonomous region); and in Southeast Asia, Burma (Myanmar), Cambodia (Kampuchea), East Timor, Indonesia, Laos, Malaysia, Papua New Guinea, the

Philippines, Singapore, Thailand, and Vietnam. Chicago's Southern Asia strength is built around two related bodies: a federally-funded Title VI South Asia Language and Area Center (SALAC), the Committee on Southern Asian Studies (COSAS) made up of faculty across the University who share teaching and research interests in Southern Asia.

The University of Chicago Committee on Southern Asian Studies and the South Asia Language and Area are separate, but closely aligned, organizations promoting the study of South and Southeast Asia at the University of Chicago.

The Committee on Southern Asian Studies is an interdepartmental and interdivisional committee that coordinates research and teaching dealing with the countries of South and Southeast Asia. The committee works cooperatively with the South Asia Language and Area Center, inaugurated in 1959 with grants from the Ford Foundation and the United States Department of Education under the National Defense Education Act, Title VI.

The center (SALAC) and the committee work to enhance opportunities available to scholars both in the United States and in South and Southern Asia and to foster intellectual and scholarly communication and inter-disciplinary collaboration among the students and faculty at the University of Chicago and the wider Chicago and Southern Asian Studies communities.

The committee and the center do not offer degrees, but cooperate with the several departments, committees, and schools within which specialized work on South or Southeast Asia may be combined with a degree program. These include the College; the Departments of Anthropology, Art History, Comparative Human Development, Comparative Literature, Economics, English, History, Linguistics, Music, Political Science, Psychology, Sociology, and South Asian Languages & Civilizations; the Committees on History of Culture, International Relations, and Social Thought; in the Divinity School, the fields of History of Religions, Church History, Philosophy of Religions; and in the Law School, International and Comparative Legal Studies.

A joint A.M. in Southern Asia Studies/M.B.A. is administered through the Booth School of Business and the Division of the Social Sciences. Advanced degree programs with specialization in Bengali, Hindi, Malayalam, Marathi, Pali, Sanskrit, Tamil, Telugu, Tibetan, and Urdu languages, literatures, and civilizations are available in the Department of South Asian Languages & Civilizations. Persian and Arabic are available through the Department of Near Eastern Languages & Civilizations. A limited number of fellowships, scholarships, and grants in aid are awarded by the committee in support of training or research dealing with South or Southeast Asia. Students in all disciplines interested in training in South Asian languages may also apply for Foreign Language and Area Studies Fellowships under Section 602 of Title VI of the Higher Education Act of 1965 as amended. For further information, please write to the Director of the South Asia Language and Area Center.

The University of Chicago Library has a very strong and well balanced collection of South Asian books, government documents, journals, and maps. It includes extensive holdings in all South Asian languages, as well as publications on the subcontinent from major publishing centers around the world. The library has

been a comprehensive participant since 1962 in the Library of Congress Foreign Acquisitions Program for South Asia. The library s membership in the nearby Center for Research Libraries, and in its South Asia Microfilm Project (SAMP), provides ready access to additional valuable research materials. The library's South Asia Collection staff coordinates acquisition and processing, and provides specialized reference service. A smaller collection of Southeast Asian materials is limited to Western language works on the area from Burma to the Philippines.



# THE DIVISION OF THE BIOLOGICAL SCIENCES AND THE PRITZKER SCHOOL OF MEDICINE

Kenneth S. Polonsky, M.D.

- Richard T. Crane Distinguished Service Professor
- Dean of the Division of the Biological Sciences and the Pritzker School of Medicine
- Executive Vice President of Medical Affairs Victoria E. Prince, Ph.D.
- Professor, Department of Organismal Biology & Anatomy
- Associate Dean and Director, Office of Graduate and Postdoctoral Affairs Holly J. Humphrey, M.D.
- Professor of Medicine
- Dean for Medical Education

The Division of the Biological Sciences is unique in encompassing both a medical school and graduate programs in biological sciences. Faculty in the division teach biology to undergraduate students, but the organization and administration of baccalaureate programs in the biological sciences is the responsibility of the College, through the office of the Master of the Biological Sciences Collegiate Division. The departments and faculty within the division are not separated by providing instruction to medical, graduate or college students, but rather all serve the entire curricular needs of the students in the university. This organizational structure makes possible a wide range of contacts and interactions among students and faculty in the basic and clinical science areas and affords singular study and research opportunities for students regardless of their program of study.

#### **DEGREES AND REQUIREMENTS**

The Division of the Biological Sciences offers the degrees of Master of Science, Doctor of Philosophy, Doctor of Medicine, or Doctor of Medicine with Honors. Combined degrees (A.B./S.M. or M.D./Ph.D.) are available within certain special programs.

Recommendation for any of these degrees is conditional on the satisfactory completion of the academic requirements for the degree and the maintenance of proper conduct by the student while in the University.

#### MASTER OF SCIENCE

The Master of Science degree is awarded by the Division of the Biological Sciences in very specific circumstances: the S.M in Health Studies for clinical professionals;

the S.M. in Translational Research for PhD students in select BSD graduate programs; or as below:

- Those individuals not continuing in their Ph.D. program of study may be awarded a terminal masters degree.
- Some students who are continuing their Ph.D. programs specify a desire to receive a transitional Master of Science degree.

#### DOCTOR OF PHILOSOPHY

A general statement of the conditions under which this degree is awarded is presented here. The more specific program requirements are described in the sections outlining the offerings of each graduate program.

- Bachelors degree from an accredited undergraduate institution.
- A minimum of three years of graduate work beyond the level of the bachelors degree. Credit for graduate work completed at other institutions may be given if recommended by the graduate program concerned and approved by the Associate Dean for Graduate and Postdoctoral Affairs.
- Completion of nine, letter graded courses at the University of Chicago, with a B
  average in course grades. This is a minimum; individual units may have more
  stringent requirements.
- Preliminary examination testing the candidate's general knowledge of their field of study.
- Fulfillment of the divisional teaching requirement. Before the Ph.D. can be awarded, students are required to serve as a teaching assistant twice (two quarters) for credit in preapproved positions in the biological sciences.
- Fulfillment of the divisional ethics requirement. All students receive training
  in scientific integrity and the ethical conduct of research. The first course is
  completed in the first year of study and the second training is taken in the fifth
  year, if the PhD is not yet completed.
- Formal admission to candidacy for the degree upon recommendation of the graduate program, after completion of all program-specific requirements, including course work and the preliminary examination if applicable. Admission to candidacy is approved by the Associate Dean for Graduate and Postdoctoral Affairs at least eight months before the degree is granted but generally occurs at the beginning of the third year of study.
- Acceptance of a dissertation submitted by the student to the graduate program having jurisdiction over the student's degree.
- A successful final examination administered by the graduate program concerned.

#### COMBINED BACHELOR'S/MASTER'S

Students who have completed at least three years of undergraduate study in the College of the University of Chicago but have not completed their bachelor's degree may sometimes qualify for admission to a special A.B./S.M. program leading directly to the master's degree. Acceptance into such a program depends on a student's qualifications and on departmental policy. Only a few departments currently offer such a combined program. Inquiries should be made to the appropriate departments or the College office.

#### DOCTOR OF MEDICINE

This degree is normally awarded after fourteen quarters of satisfactory full time work at the University of Chicago Pritzker School of Medicine. To qualify for the M.D. degree, students must have completed at least the last eight academic quarters of medical studies in the School. Please see the Pritzker School of Medicine section for additional information on this degree.

#### DOCTOR OF MEDICINE WITH HONORS

Each year during the spring, the committee on honors and awards entertains nominations from individual departments of senior medical students to be awarded graduation with honors. It is the purpose of this committee to select those students who have demonstrated leadership qualities, outstanding scholastic performance, and significant research abilities and accomplishments. Membership in Alpha Omega Alpha is taken into consideration, but is not a prerequisite for the award. The names of students so honored appear in the convocation program followed by the notation with Honors. This notation also appears both on the official academic records and on the diplomas of such students.

#### M.D./PH.D. DEGREES

In addition to the regular degree programs in medicine (M.D.) and the basic sciences (Ph.D.), the Division of the Biological Sciences administers a few special joint degree programs, such as the Medical Scientist Training Program, Growth and Development M.D./Ph.D. Program and the MD-PhD program in Medicine, the Social Sciences and Humanities.



# PROGRAMS OF GRADUATE STUDY IN THE BASIC BIOLOGICAL SCIENCES

The Division of the Biological Sciences offers a variety of graduate programs leading to the Ph.D. degree. Joint programs also may be devised with departments, such as chemistry and psychology, in other divisions of the University. Graduate programs are offered under the aegis of divisional departments as well as interdepartmental committees composed of faculty members with a common interest in a broad but definable area of advanced study. Recent years have seen a trend in graduate study in the biological sciences away from strict separations of disciplines and toward interdisciplinary approaches to research. Toward a similar goal in the Division of the Biological Sciences, several degree granting units have joined together in clusters, with a common admissions process and a core basic curriculum. The cluster arrangement offers students greater flexibility in their choice of graduate program, while enhancing interdisciplinary research opportunities. The fundamentals of graduate education in the division are not altered by these provisions. Students complete their degree in individual graduate programs.

The goal of the programs, whether offered by clusters or individual departments or committees, is the creation and dissemination of fundamental knowledge of life processes and the education and training of outstanding young scholars in these disciplines. To this end, the Division of the Biological Sciences has assembled a dedicated and talented faculty, strong in research and teaching, and has developed laboratory and other facilities of the first rank that allow the faculty and graduate students to pursue their goals at the highest level of excellence.

The clusters in the division that offer programs of study leading to the Ph.D. degree are:

Biomedical Sciences: Cancer, Immunology, Microbiology, Molecular Metabolism and Nutrition, and Pathology

- The Committee on Cancer Biology
- The Committee on Immunology
- The Committee on Molecular Metabolism and Nutrition
- The Committee on Microbiology
- The Department of Pathology
  - (Graduate Program in Molecular Pathogenesis and Molecular Medicine)

Darwinian Sciences: Ecological, Integrative, and Evolutionary Biology

- The Department of Ecology and Evolution
- The Committee on Evolutionary Biology
- The Department of Organismal Biology and Anatomy
  - (Graduate Program in Integrative Biology)

Molecular Biosciences: Biochemistry, Genetics, and Cell and Developmental Biology

- The Department of Biochemistry and Molecular Biology
  - (Graduate Program in Biochemistry and Molecular Biophyics)
- The Committee on Development, Regeneration, and Stem Cell Biology
- The Department of Human Genetics
- The Committee on Genetics, Genomics, and Systems Biology
- The Department of Molecular Genetics and Cell Biology
  - (Graduate Program in Cell and Molecular Biology)

Neuroscience: Computational Neuroscience, Neurobiology and Integrative Neuroscience

- The Committee on Computational Neuroscience
- Program in Integrative Neuroscience (Psychology)
- The Committee on Neurobiology

These degree granting units have not entered into a cluster arrangement and provide separate admission. They are:

- The Department of Health Studies (M.S. and Ph.D.)
- Interdisciplinary Scientist Training Program (Janelia Farm)
- The Committee on Medical Physics
- The Committee on Biophysical Sciences (Joint with the Division of Physical Sciences)

#### **ADMISSION PROCEDURES**

The following requirements and procedures apply to those students wishing to follow a course of study leading to the Doctor of Philosophy degree in the division. Students may apply to a single cluster and as many as four individual units, indicating their choices in order of preference. According to their own schedules, the units applied to will communicate directly with the student as needed. Final decision letters are issued by the BSD Office of Graduate and Postdoctoral Affairs (OGPA). If admitted to more than one program, applicants will have the option of accepting the program of their choice.

#### APPLICATION MATERIALS

Information about graduate programs and application materials is available at http://gradprograms.bsd.uchicago.edu/.

#### DEADLINES

Applications are due December 1st. Late applications will be reviewed only at the discretion of the Associate Dean for Graduate and Postdoctoral Affairs. Incomplete applications will be evaluated on the basis of materials received at the time of the regular review process. Interviews are often required and students will be notified to set up visits. On or about March 1 the process of notification of acceptance or rejection of applicants begins. Responses by applicants to offers of admission are due to OGPA by April 15.

#### **CREDENTIALS**

An applicant who holds an undergraduate degree from an accredited institution is considered for admission on the basis of:

- 1. An excellent undergraduate record
- 2. The Graduate Record Examination
- 3. A demonstrated interest in a research career
- 4. Three letters of recommendation addressing the scientific abilities and potential for graduate studies of the applicant
- 5. Proof of English proficiency for foreign students whose native language is not English; either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS).

Certain programs require additional credentials. These additional requirements may be ascertained by contacting the individual program.

#### **FUNDING**

Most graduate students in the BSD working toward the Ph.D. degree are fully funded (regular tuition and fees and prevailing competitive stipend). Funds for this support are derived from numerous sources, including federal or private training grants, institutional funds, endowed funds, research grants and individual awards to students. During a student's course of study, support mechanisms may vary. Funds for international students are limited to institutional sources.



# Program in Biochemistry and Molecular Biophysics

#### Chair

• Tobin R. Sosnick

#### **Professors**

- Francisco Bezanilla
- Glyn Dawson, Pediatrics
- Geoffrey Greene, Ben May Department for Cancer Research
- Stephen B. H. Kent
- Shohei Koide
- · Anthony A. Kossiakoff
- Marvin W. Makinen
- Stephen Meredith, Pathology
- Keith Moffat
- Tao Pan
- Eduardo Perozo
- Joseph A. Piccirilli
- · Phoebe A. Rice
- · Benoit Roux
- Nancy B. Schwartz, Pediatrics
- · James A. Shapiro
- Tobin R. Sosnick

#### **Associate Professors**

- Erin J. Adams
- · Sean D. Crosson
- · Robert J. Keenan
- David Kovar, Molecular Genetics and Cell Biology
- Ronald S. Rock
- Alex Ruthenburg, Molecular Genetics and Cell Biology Assistant Professors
- D. Allan Drummond
- Demet Arac-Ozkan

**Emeritus Faculty** 

- Wolfgang Epstein
- Herbert C. Friedmann
- · Theodore L. Steck

- · Donald F. Steiner
- Edwin W. Taylor

The Biochemistry and Molecular Biophysics graduate program is a highly interdisciplinary program of study offered by the Department of Biochemistry and Molecular Biology. The program forges a scientific culture of collaboration across the physical and biological sciences and among diverse laboratories. In this environment, students will have the opportunity to engage in research that aims to understand biological processes at the molecular level. The program is designed to encourage students to pursue research interests at the biological-physical sciences interface using diverse approaches such as structural and chemical biology, molecular and single molecule biophysics, combinatorial mutagenesis, protein engineering and RNA and DNA protein recognition.

#### Admission

For information about applying to our graduate program, please visit our website at http://molbio.bsd.uchicago.edu/index.php.

#### Degrees

#### DOCTOR OF PHILOSOPHY

A Ph.D. program requires generally 4 to 6 years of study. In the first year, students engage in course work and small research projects in several laboratories to become acquainted with the department. Also during the first year there are many opportunities to attend departmental seminars and the Graduate Student Seminar Series and to participate in the visits of invited speakers. In the summer quarter of the first year students engage in the Preliminary Examination, in which they develop, write, and defend an original research proposal. After successful completion of the Preliminary Examination, students choose a research advisor, carry out their Ph.D. research in the advisor's laboratory, and write and orally defend a thesis.

Classes may be substituted by graded laboratory rotations. Of the nine courses only the following are required:

BCMB 30400	Protein Fundamentals	100
BCMB 31600	Cell Biology I	100
BCMB 31200	Molecular Biology-I	100
BCMB 32200	Biophysics of Biomolecules	100

Two additional courses (BCMB 31900 – Introduction to Faculty Research, affectionately called "Faculty All Stars" and BCMB 31800 – Current Seminar Topics in Biochemistry and Molecular Biology) are required. The introduction to faculty research course is not for credit; however, BCMB 31800 is for ½ credit. Each student is required to be a Teaching Assistant for a total of two quarters in their third and fourth years of residence.

The Preliminary Examination in BMB consists of a written research proposal that is prepared and submitted during the summer quarter of the first year (the fourth quarter in residence). Students (including MSTP students interested in joining BMB) will be permitted to take the Preliminary Examination only after all course

and grade requirements have been met. The exam consists of a concise written research proposal and an oral defense of the proposal. Students are expected to demonstrate their ability to 1) identify a scientific problem, 2) propose experiments to address the problem, 3) interpret potential outcomes from the experiments, and 4) frame the question and results in a broader scientific context. In addition, students are evaluated on their ability to convey their ideas clearly in the written proposal and to defend the proposal orally. The chairperson of each exam committee will then contact the student regarding the outcome of their exam and provide written feedback. Two outcomes are possible: Pass or Revisions Needed. If revisions are required, the student will have the opportunity to respond to the committee's concerns and either revise portions of the proposal or re-write the entire proposal as indicated by the committee. In these cases, students will need to write a cover letter addressing the concerns of the committee and the changes that have been made. In addition, students may be required to re-defend the revisions orally with part or all of the exam committee. If a student is asked to re-write and redefend the entire proposal, an additional faculty member will be added to the exam committee. Inadequate performance on a second exam is grounds for dismissal from the program. For continuation in the program, students must successfully pass the Preliminary Examination by the end of the fifth quarter of full-time residence as a graduate student in Biochemistry and Molecular Biology.

During the second year, students select a thesis advisor and begin laboratory research. To complete the Ph.D. degree, they must prepare, under the general direction of an appointed doctoral committee, a dissertation based upon their original research. A public seminar describing the results of the dissertation research must be presented and the dissertation must be successfully defended before the doctoral committee.

#### BIOCHEMISTRY AND MOLECULAR BIOLOGY COURSES

#### BCMB 30266. Molecular Immunology. 100 Units.

This course will examine the molecular principles of immune recognition. We will explore the roles of protein modification, protein-protein and protein-DNA interactions in the discrimination between self and non-self, and will study the molecular fundamentals of cell stimulation and signaling. Primary literature focused on molecular research of the immune system will be integrated with lectures on commonly used biochemical, structural and immunological techniques used in the research papers examined. Emphasis is placed on class participation.

Instructor(s): E. Adams Terms Offered: Spring

Prerequisite(s): Prereq: BIOS 20200, BIOS 25256, or consent of instructor

#### BCMB 30400. Protein Fundamentals. 100 Units.

The course covers the physical-chemical phenomena that define protein structure and function. Topics include: the principles of protein folding, molecular motion and molecular recognition; protein evolution, design and engineering; enzyme catalysis; regulation of protein function and molecular machines; proteomics and systems biology. Workshop on X-ray Crystallography: The workshop is an addendum to Protein Fundamentals and is required for all BCMB students. This one week workshop will provide students with an intensive introduction to protein structure determination by x-ray crystallography. In addition to lectures, an extensive laboratory component will give students the opportunity to carry out protein crystallization, data collection (at Argonne), structure determination, refinement, model building and validation.

Instructor(s): R. Keenan, S. Koide, J. Piccirilli Terms Offered: Autumn Equivalent Course(s): HGEN 30400,MGCB 30400

#### BCMB 30600. Nucleic Acid Structure and Function. 100 Units.

This course focuses on the biochemistry of nucleic acids. Topics include nucleic acid structure, folding, and chemistry, protein-nucleic acid interactions, non-coding RNAs, and the enzymology of key processes such as DNA replication, repair and recombination. A special emphasis is placed on primary literature.

Instructor(s): P. Rice, T. Pan Terms Offered: Autumn

Prerequisite(s): Course in biochemistry, molecular biology and organic chemistry

#### BCMB 30800. Single Molecule Biochemistry. 100 Units.

This course presents a series of advanced case studies designed to familiarize students with current single molecule research. Topics include: motor proteins and the cytoskeleton, nucleic acid processing enzymes, ion channels, and force spectroscopy and macromolecule folding.

Instructor(s): R. Rock, F. Bezanilla Terms Offered: Spring

#### BCMB 31000. Fundamentals of Molecular Biology. 100 Units.

This course covers the structure of genetic material, chromatin, replication, DNA repair and transcription, including its regulation, RNA processing, post-transcriptional regulation, and protein synthesis. Third- or fourth-year standing is required for undergraduates; any graduate student may enroll.

Instructor(s): U. Storb, J. Staley Terms Offered: Winter

Prerequisite(s): For College students: Basic knowledge of genetics and biochemistry Equivalent Course(s): BIOS 21208,MGCB 31000

#### BCMB 31100. Evolution of Biological Molecules. 100 Units.

The course connects evolutionary changes imprinted in genes and genomes with the structure, function and behavior of the encoded protein and RNA molecules. Central themes are the mechanisms and dynamics by which molecular structure and function evolve, how protein/ RNA architecture shapes evolutionary trajectories, and how patterns in present-day sequence can be interpreted to reveal the interplay data of evolutionary history and molecular properties. Core concepts in macromolecule biochemistry (folding and stability of proteins and RNA, structure-function relationships, kinetics, catalysis) and molecular evolution (selection, mutation, drift, epistasis, effective population size, phylogenetics) will be taught, and the interplay between them explored.

Instructor(s): A. Drummond, J. Thornton Terms Offered: Winter

Prerequisite(s): Comfort with basic computer programming (course will use Python and R); undergraduate biology, chemistry, calculus, and introductory statistics. Equivalent Course(s): HGEN 31100, ECEV 31100

#### BCMB 31200. Molecular Biology-I. 100 Units.

Nucleic acid structure and DNA topology; methodology; nucleic-acid protein interactions; mechanisms and regulation of transcription in eubacteria, and of replication in eubacteria and eukaryotes; mechanisms of genome and plasmid segregation in eubacteria.

 $Instructor(s)\hbox{:}\ L.\ Rothman-Denes\ Terms\ Offered\hbox{:}\ Winter$ 

Equivalent Course(s): MGCB 31200, DVBI 31200

#### BCMB 31300. Molecular Biology-II. 100 Units.

The content of this course covers the mechanisms and regulation of eukaryotic gene expression at the transcriptional and post-transcriptional levels. Our goal is to explore research frontiers and evolving methodologies. Rather than focusing on the elemental aspects of a topic, the lectures and discussions highlight the most significant recent developments, their implications and future directions. Instructor(s): J. Staley, A. Ruthenburg Terms Offered: Spring

Equivalent Course(s): MGCB 31300, DVBI 31300

#### BCMB 31358. Simulation, Modeling, and Computation in Biophysics. 100 Units.

This course develops skills for modeling biomolecular systems. Fundamental knowledge covers basic statistical mechanics, free energy, and kinetic concepts. Tools include molecular dynamics and Monte Carlo simulations, random walk and diffusion equations, and methods to generate random Gaussian and Poisson distributors. A term project involves writing a small program that simulates a process. Familiarity with a programming language or Mathlab would be valuable. Instructor(s): B. Roux Terms Offered: Spring

Prerequisite(s): BIOS 20200 and Bios 26210-26211, or consent from instructor Equivalent Course(s): BIOS 21358,CPNS 31358

#### BCMB 31400. Genetic Analysis of Model Organisms. 100 Units.

Fundamental principles of genetics discussed in the context of current approaches to mapping and functional characterization of genes. The relative strengths and weaknesses of leading model organisms are emphasized via problem-solving and critical reading of original literature.

Instructor(s): A. Palmer, D. Bishop, E. Ferguson, J. Malamy Terms Offered: Autumn Equivalent Course(s): DVBI 31400,HGEN 31400,MGCB 31400

#### BCMB 31600. Cell Biology I. 100 Units.

Eukaryotic protein traffic and related topics, including molecular motors and cytoskeletal dynamics, organelle architecture and biogenesis, protein translocation and sorting, compartmentalization in the secretory pathway, endocytosis and exocytosis, and mechanisms and regulation of membrane fusion.

Instructor(s): A. Turkewitz, B. Glick Terms Offered: Autumn

Equivalent Course(s): MGCB 31600, DVBI 31600

## BCMB 31800. Current Seminar Topics in Biochemistry & Molecular Biology. 50 Units.

This course will expose students to current research topics in biochemistry and molecular biology by highlighting a selection of speakers (departmental faculty adn other invited speakers) from the weekly seminar series. Prior to each highlighted seminar, we will discuss relevant papers and subsequently, we will review the seminar. This is a required ½ credit course for all BMB first-year graduate students and will be graded as Pass/Fail.

Terms Offered: Autumn

Equivalent Course(s): BPHS 31800

#### BCMB 31900. Introduction to Research. 100 Units.

Lectures on current research by departmental faculty and other invited speakers. A required course for all first-year graduate students

Instructor(s): Staff Terms Offered: Autumn, Winter

Equivalent Course(s): MGCB 31900, DVBI 31900, GENE 31900, HGEN 31900

#### BCMB 32200. Biophysics of Biomolecules. 100 Units.

This course covers the properties of proteins, RNA, and DNA, as well as their interactions. We emphasize the interplay between structure, thermodynamics, folding, and function at the molecular level. Topics include cooperativity, linked equilibrium, hydrogen exchange, electrostatics, diffusion, and binding.

Instructor(s): T. Sosnick Terms Offered: Spring

Prerequisite(s): Consent of instructor

Equivalent Course(s): BIOS 21328, BPHS 31000

#### BCMB 32300. Structure and Function of Membrane Proteins. 100 Units.

This course will be an in depth assessment of the structure and function of biological membranes. In addition to lectures, directed discussions of papers from the literature will be used. The main topics of the courses are: (1) Energetic and thermodynamic principles associated with membrane formation, stability and solute transport (2) membrane protein structure, (3) lipid-protein interactions, (4) bioenergetics and transmembrane transportmechanisms, and (5) specific examples of membrane protein systems and their function (channels, transporters, pumps, receptors). Emphasis will be placed on biophysical approaches in these areas. The primary literature will be the main source of reading.

Instructor(s): E. Perozo Terms Offered: Autumn

Equivalent Course(s): MGCB 32300

#### BCMB 32500. Bioorganic Chemistry. 100 Units.

A goal of this course is to relate chemical phenomena with biological activities. We cover two main areas: (1) chemical modifications of biological macromolecules and their potential effects; and (2) the application of spectroscopic methods to elucidate the structure and dynamics of biologically relevant molecules.

Terms Offered: Not offered in 2013-14 Equivalent Course(s): CHEM 32500

#### BCMB 32700. Protein Aggregation /"Misfolding" and Protein Design. 100 Units.

This course will discuss in depth two major topics in protein science in biomedical sciences, protein misfolding and protein design. The class will examine milestone papers from the primary literature that cover important concepts and techniques for the topics.

Instructor(s): S. Koide, S. Meredith Terms Offered: Winter

## BCMB 39800. Selected Reading Topics in Biochemistry and Molecular Biology. VAR Units.

Subject matter for individual tutorial-based study is selected through prior consultation and is given under the guidance of a faculty member. The student and faculty member must indicate at time of registration whether the course will be taken on a letter grade or pass/fail basis.

Instructor(s): Staff Terms Offered: Autumn, Winter, Spring, Summer

Prerequisite(s): Consent of Department and Instructor

#### BCMB 39900. Introduction to Research. VAR Units.

The student participates in one of the research programs of the Department.

Instructor(s): Staff Terms Offered: Summer

Prerequisite(s): Consent of Department Chairman and individual faculty member.

#### BCMB 40100. Research in Biochemistry and Molecular Biology. VAR Units.

The student conducts original investigation under the direction of a faculty member. The research is presented and defended as a dissertation in candidacy for the degree of Doctor of Philosophy.

Instructor(s): Staff Terms Offered: Autumn, Winter, Spring, Summer Prerequisite(s): Completion of course requirements adn Preliminary Examination at the Ph.D. level and approval of Chairman of the Department.



# COMMITTEE ON CANCER BIOLOGY

#### Chair

· Geoffrey Greene

### **Professors**

- Habibul Ahsan, Health Studies
- Eric Beyer, Pediatrics
- Douglas Bishop, Radiation and Cellular Oncology
- Marcus Clark, Medicine
- Susan Cohn, Pediatrics
- Suzanne Conzen, Medicine
- · Nancy Cox, Medicine
- M. Eileen Dolan, Medicine
- Wei Du, Ben May Department for Cancer Research
- · Richard Fehon, Molecular Genetics and Cell Biology
- Edwin Ferguson, Molecular Genetics and Cell Biology
- Yang-Xin Fu, Pathology
- Thomas Gajewski, Medicine
- David Grdina, Radiation and Cellular Oncology
- Geoffrey Greene, Ben May Department for Cancer Research
- Gregory Karczmar, Radiation and Cellular Oncology
- Stephen Kron, Molecular Genetics and Cell Biology
- Howard Halpern, Radiation and Cellular Oncology
- Bruce Lahn, Human Genetics
- Michelle Le Beau, Medicine
- · Ernst Lengyel, Obstetrics and Gynecology
- Maciej Lesniak, Surgery
- · Anning Lin, Ben May Department for Cancer Research
- Olufunmilayo Olopade, Medicine
- Ilaria Rebay, Ben May Department for Cancer Research
- Carrie Rinker-Schaeffer, Surgery
- Marsha Rosner, Ben May Department for Cancer Research
- · Benoit Roux, Biochemistry and Molecular Biology
- Janet Rowley, Medicine
- Ravi Salgia, Medicine
- Hans Schreiber, Pathology
- · Walter Stadler, Medicine
- Ursula Storb, Molecular Genetics and Cell Biology
- Wei-Jen Tang, Ben May Department for Cancer Research

- Mitchel Villereal, Neurobiology, Pharmacology and Physiology
- Ralph R. Weichselbaum, Radiation and Cellular Oncology Associate Professors
- Nickolai Dulin, Medicine
- · Lucy Godley, Medicine
- Tong Chuan He, Surgery
- Akira Imamoto, Ben May Department for Cancer Research
- Barbara Kee, Pathology
- Mark Lingen, Pathology
- Kay Macleod, Ben May Department for Cancer Research
- Kenan Onel, Pediatrics
- Michael Thirman, Medicine
- · Amittha Wickrema, Medicine
- Yingming Zhao, Ben May Department for Cancer Research Assistant Professors
- · Jianjun Chen, Medicine
- Kenneth Cohen, Medicine
- Jill De Jong, Pediatrics
- · Kathleen Goss, Surgery
- · Fotini Gounari, Medicine
- Yu-Ying He, Medicine
- Rong (Stephanie) Huang, Medicine
- Richard Jones, Ben May Department of Cancer Research
- Deborah Lang, Medicine
- Peter Savage, Pathology
- · Dorothy Sipkins, Medicine
- Michael Spiotto, Radiation and Cellular Oncology
- Donald Vander Griend, Surgery
- Xiayang Wu, Ben May Department of Cancer Research

The Committee on Cancer Biology offers a graduate program of study leading to the Doctor of Philosophy degree in Cancer Biology, and is supported by a National Cancer Institute sponsored training grant for predoctoral and postdoctoral trainees in cancer biology. The program provides multidisciplinary training for students interested in pursuing a research career in any aspect of cancer biology, focusing on mammalian (particularly human) biology as well as the study of genes and processes in other eukaryotic organisms. The program provides doctoral students with the most up to date knowledge and research training in molecular and cellular aspects of cancer biology and prepares the students for leadership positions in the academic community. The broad range of interests and expertise of the 61 faculty members of the Committee on Cancer Biology enables students to concentrate in multiple areas of cancer biology, including angiogenesis, animal models of cancer,

apoptosis and cell survival, cancer genetics, cell cycle regulation, carcinogenesis, chromosome damage and repair, drug discovery/development, hormone action, metastatic progression, radiation biology, signal transduction, and tumor biology and immunology.

The Committee on Cancer Biology is a member of the Biomedical Sciences Cluster, which also includes graduate programs from the Committee on Immunology, the Committee on Microbiology, the Committee on Molecular Metabolism and Nutrition, and the Department of Pathology's Molecular Pathogenesis and Molecular Medicine Graduate Program. The five academic units share several common courses and additional common events for students and faculty within the cluster. The goal of the cluster system is to encourage interdisciplinary interactions among both trainees and faculty, and to allow students flexibility in designing their particular course of study.

In addition to formal course work, the program sponsors a student led journal club, a Student/Postdoctorate Research Presentation group, and an annual cluster retreat in which students and trainees present their research findings. In addition, the program co-sponsors the Ben May Symposium with the Ben May Department for Cancer Research. This symposium brings speakers of international renown to campus. Students and trainees also have the opportunity to attend national meetings and cancer biology workshops off campus. Through the auspices of the Ben May Department for Cancer Research, the Section of Hematology/Oncology, and the University of Chicago Cancer Research Center (an NCI designated Cancer Center), there are several additional seminar series and a Clinical Cancer Research/Basic Science Research Translational conference. Thus, there is a thriving, interactive community of cancer researchers.

### ADMISSION

Prospective students interested in obtaining the Ph.D. in cancer biology should submit an application to the Biological Sciences Division by December 1st of each year; indicate their cluster of interest as Biomedical Sciences and select cancer biology as their proposed degree program.

# THE DEGREE OF DOCTOR OF PHILOSOPHY

Ph.D. requirements include:

- Completion of 9.5 course credits consisting of basic science, cancer biology and elective courses
- A preliminary examination in the form of a mock NIH-style grant proposal
- · A dissertation based on original research
- A final thesis examination

### CANCER BIOLOGY COURSES

# CABI 30800. Cancer Biology 1: Introduction to Cancer Biology. 100 Units.

Overview of cancer biology, including epidemiology, pathology, diagnosis and staging, and the basis for various therapeutic strategies. Also covered are experimental models for cancer, including the generation and validation of animal models. The course will emphasize several tumor models, such as breast cancer, hematological malignancies, cervical carcinoma, colon carcinoma, and sarcomas. Instructor(s): M. Lingen Terms Offered: Autumn

# CABI 30900. Cancer Biology 2: Molecular Mechanisms in Cancer Biology. 100 Units.

This course provides students with an in-depth understanding of how key cellular processes are deregulated in cancer and the molecular mechanisms underpinning these defects. The course covers cell cycle checkpoint control, cell death, tumor suppressor and oncogene function, DNA repair mechanisms, epigenetics of cancer, nuclear hormone receptor activity in cancer, tumor metabolism, hypoxia responses, angiogenesis and metastasis. In addition to material covered in formal lectures, discussion sessions cover tumor stem cells, "oncogene addiction," inflammatory responses, cancer therapeutics, mouse models of human cancer and other topical subjects relevant to understanding tumor initiation and progression, as well as how current research may facilitate cancer treatment.

Instructor(s): K. Macleod Terms Offered: Winter

Equivalent Course(s): MPMM 30900

# CABI 31200. Cancer Biology 3: Signal Transduction and Model Organisms. 100 Units.

The aim of this course is to familiarize students with the guiding principles of cellular signal transduction that include regulated protein interactions, complex signaling network architecture, and the interplay between signaling and associated systems such as metabolism. These principles will be illustrated by detailed examination of various signaling pathways and viewed through the lens of applying our understanding of signal transduction to progress in cancer prevention and therapy.

Instructor(s): D. Vander Griend Terms Offered: Spring

Equivalent Course(s): NPHP 31200

# CABI 31500. Cancer Biology 4: Frontiers in Cancer Research. 100 Units.

This is a lecture-discussion course focused on developing and testing a hypothesis, building a scientific plan to support this hypothesis, and obtaining experience in the grant-writing process as well as responding to criticisms and presenting one's grant in a formal and concise manner. This workshop-style course will focus on a variety of topics in the field of cancer biology.

Instructor(s): D. Lang Terms Offered: Spring

CABI 31800. Cancer Biology 6: Cancer Genomics and Systems Biology. 100 Units.

Cancer is a genetic disease characterized by the complex actions and interactions of environmental factors, multiple inherited and acquired genetic factors, networks, and cells. Together, they predispose some individuals to develop cancer, protect others against it despite lifelong exposures to carcinogens, and determine the likelihood of response to therapy. This inherent complexity presents constant challenges for diagnosing and treating patients with cancer. Until recently, it has not been possible to explore the myriad genetic and biological factors varying among individuals that may account for the differences in susceptibility to cancer, the response to treatment, and the trajectory of disease. With the advent of new genome-wide and high-throughput technologies, we are now beginning to unravel the genetic underpinnings of cancer. A systems biology approach towards cancer examines the many components of the disease simultaneously. It is hoped that findings resulting from systems biology studies will form the foundation for "personalized medicine." The goal of this course is to teach students to manipulate and analyze the enormous datasets generated by genome-wide platforms. The course is divided into four modules, each of which is dedicated to an in depth exploration of a single platform: 1) genome-wide association studies (GWAS); 2) next-generation sequencing 3) systems analysis of proteins; and 4) integrated data analysis. Modules are comprised of both lectures and labs, and for each module, there is a student-led presentation of seminal papers demonstrating the translational potential of each technology to the investigation of human disease. Although the focus of the course is cancer, the course has relevance to students interested in using systems biology strategies to investigate a variety of complex diseases. The course is complementary and non-overlapping with material covered by other Cancer Biology courses.

Instructor(s): K. Onel, A. Skol, R. Jones Terms Offered: Autumn Equivalent Course(s): ECEV 31800

### CABI 31900. Protein Structure and Functions in Medicine. 100 Units.

This course explores how molecular machinery works in the context of medicine (vision, fight or flight, cancer, and action of drugs). We first explore the physical and biochemical properties of proteins in the context of cellular signaling. We then examine how proteins and other cellular components make up the signal transduction pathway of humans and conduct their biological functions. The course engages students to strengthen their scientific communication and teaching skills via the in-class podcast, oral examinations, computer-aided structural presentations, student lectures, and discussions.

Instructor(s): W-J. Tang Terms Offered: Winter

Prerequisite(s): Completion of a Biological Sciences Fundamentals sequence.

Biochemistry strongly recommended.

Equivalent Course(s): BIOS 21349, NURB 31349

# CABI 39000. Cancer Biology 5: Introduction to Experimental Cancer Biology. 050 Units.

This course is related to a seminar series sponsored by the Committee on Cancer Biology and also incorporates seminars of interest from other Cluster programs. Typically, students meet to discuss research papers published by the following week's seminar speaker, attend the seminar, and then meet with the speaker afterward. The goal of the course is to broaden the students' exposure to current research and encourage discussion of scientific ideas among peers.

Instructor(s): K. Onel, K. Goss Terms Offered: Autumn, Winter, Spring

# CABI 40300. Systems Analysis of Proteins and Post-Translational Modifications. 100 Units.

Proteins play a major role in all cellular processes and their modification represents a major vehicle for expanding the genetic code of the cellular proteome (the inventory of all protein species in a cell). Given the crucial roles in the major cellular pathways and diseases such as cancer, proteins and PTM studies are a critical aspect of most biological projects. This course will cover concepts (including biochemistry, proteomics/systems biology, molecular biology, and bioinformatics), and practical techniques for identifying and quantifying proteins and PTMs. Topics include, but are not limited to quantification of protein interactions, abundances, modifications including phosphorylation, ubiquitination, and lysine acetylation, and subsequent discussion of biochemical and functional roles of proteins and PTMs in regulating biological networks.

Instructor(s): R. Jones, Y. Zhao Terms Offered: Spring

Prerequisite(s): BIOS 20200

Equivalent Course(s): BIOS 21346,IMMU 40300,MOMN 40300

### CABI 40600. Epigenetics and Cancer. 100 Units.

This class is designed to be a graduate level class that will be also open for undergraduates. Several of the goals of this class include to strengthen the students' knowledge and ability to be critical of primary research in the field of epigenetics and cancer; to understand better the epigenetic machinery; and to challenge students to write an insightful and thoughtful review to capture an important concept in epigenetics.

Instructor(s): J. Chen Terms Offered: Winter

Prerequisite(s): Completion of a Biological Sciences Fundamentals Sequence.

Equivalent Course(s): BIOS 25320

### CABI 40700. From Structure Coordinates to Protein Function. 100 Units.

The course uses the atomic coordinate of proteins to explore how molecular machinery work in the context of physiological functions (vision, fight or flight) and human diseases (cancer). We begin by exploring protein components that make up the signal transduction pathway and how these components are assembled for the various physiological functions of humans. We then proceed to consider the physical properties of proteins. We conclude by discussing the protein-targeted therapeutics of human diseases. Computer graphic exercises and in-class student presentations complement the lecture topics.

Instructor(s): W.-J. Tang Terms Offered: Winter. L.

Prerequisite(s): Completion of a Biological Sciences Fundamentals sequence and

BIOS 20200. Recommended for AP5 students. Equivalent Course(s): BIOS 21339, NURB 40700

### CABI 44300. Evolutionary and Medical Genomics. 100 Units.

Instructor(s): C-I. Wu, K. Onel Equivalent Course(s): ECEV 44300

### CABI 47300. Genomics and Systems Biology. 100 Units.

This lecture course explores the technologies that enable high-throughput collection of genomic-scale data, including sequencing, genotyping, gene expression profiling, assays of copy number variation, protein expression and protein-protein interaction. We also cover study design and statistical analysis of large data sets, as well as how data from different sources can be used to understand regulatory networks (i.e., systems). Statistical tools introduced include linear models, likelihood-based inference, supervised and unsupervised learning techniques, methods for assessing quality of data, hidden Markov models, and controlling for false discovery rates in large data sets. Readings are drawn from the primary literature.

Instructor(s): Y. Gilad, D. Nicolae Terms Offered: Spring

Prerequisite(s): STAT 23400 or Statistics in the Biomath Sequence

Equivalent Course(s): BIOS 28407, BPHS 47300, HGEN 47300, IMMU 47300

### CABI 47500. Pharmacogenomics. 100 Units.

Pharmacogenomics is aimed at advancing our knowledge of the genetic basis for variable drug response. Advances in genetic knowledge gained through sequencing have been applied to drug response, and identifying heritable genetic variants that predict response and toxicity is an area of great interest to researchers. The ultimate goal is to identify clinically significant variations to predict the right choice and dose of medications for individuals—"personalizing medicine." The study of pharmacogenomics is complicated by the fact that response and toxicity are multigenic traits and are often confounded by nongenetic factors (e.g., age, co-morbidities, drug-drug interactions, environment, diet). Using knowledge of an individual's DNA sequence as an integral determinant of drug therapy has not yet become standard clinical practice; however, several genetics-guided recommendations for physicians have been developed and are highlighted. The ethics and economics of pharmacogenomics are also discussed.

Instructor(s): M.E. Dolan, R.S. Huang Terms Offered: Spring

Prerequisite(s): BIOS 20182, 20192 or 20187 and consent of Instructor

Note(s): This course does not meet requirements for the Biological Sciences major unless taken as part of the Cancer Biology specialization.

Equivalent Course(s): BIOS 29308, CCTS 40001



# Program in Cell and Molecular Biology

### Chair

· Jonathan Staley

### Faculty accepting students into their lab

### Professors

- Douglas K. Bishop, Radiation & Cellular Oncology
- Edwin L. Ferguson
- · Richard Fehon
- Benjamin Glick
- Michael Glotzer
- · Jean Greenberg
- Stephen J. Kron
- Ilaria Rebay, Ben May Institute for Cancer Research
- John Reinitz, Statistics
- Lucia Rothman-Denes
- Jerrold Turner, Pathology Associate Professors
- Margaret Gardel, Physics
- David Kovar
- Jocelyn Malamy
- Jonathan P. Staley
- Aaron Turkewitz

**Assistant Professors** 

- Sally Horne-Badovinac
- Mohan Gupta
- Ed Munro
- Michael Rust
- Alex Ruthenburg

### Faculty not accepting students into their lab

**Professors** 

- · Robert Haselkorn
- Robert Josephs
- · Bernard Roizman, Microbiology
- · Janet D. Rowley, Medicine
- · Ursula B. Storb

**Associate Professors** 

- Gayle K. Lamppa
- Laurens J. Mets Emeritus Faculty
- Kwen Sheng Chiang
- · Wolfgang Epstein
- Rochelle Easton Esposito
- · Anthony Mahowald
- Terence E. Martin
- Theodore L. Steck, Biochemistry & Molecular Biology
- Bernard S. Strauss
- Edwin W. Taylor

The graduate program in cell and molecular biology offers training in the fields of cell biology, molecular biology, and molecular genetics for:

- Graduate students who plan to pursue research careers and teaching in the emerging areas of modern biology
- · Medical students
- Undergraduate students
- High school students

The Ph.D. degree places great emphasis on rigorous, didactic preparation in cell biology, molecular biology, and genetics, with an emphasis on defining questions, choosing questions, and interpreting data. Once qualified, advanced students choose from a wider range of opportunities for research in cell biology, molecular biology, genetics, developmental biology, and microbiology. Of special interest is the design of interdisciplinary programs that emphasize the frontiers of biology.

# THE DEGREE OF DOCTOR OF PHILOSOPHY

The graduate program in cell and molecular biology offers a program of study leading to the Doctor of Philosophy in molecular genetics and cell biology. A Ph.D. candidate must fulfill certain formal coursework requirements, pass one preliminary and one qualifying examination, and present a satisfactory dissertation describing the results of original research.

The program expects knowledge of and proficiency in cell biology, molecular biology, and genetics. This requirement will normally be met by fulfilling the formal coursework described here, but detailed degree programs are flexible. Courses taken at other institutions, in other departments, or as part of the Pritzker School of Medicine curriculum may substitute for CMB courses with approval of the curriculum committee. To fulfill the requirements for a Ph.D., nine graded courses are required. In the program in cell and molecular biology, a student must take one course in each of three areas during the first year:

- Cell biology
- Molecular biology
- Genetics

In addition to these core courses, a second course in one of these areas is required to develop greater proficiency in a subdiscipline. The total of four required courses can be selected from those marked with an asterisk (\*) in the list of courses. Three additional graded electives must be taken, one of which may be a reading course. The electives can be selected according to the student's interests and the availability of courses.

A student is also required to do three laboratory rotations before selecting an advisor and laboratory to pursue a Ph.D. dissertation. These rotations will be graded, and two will count towards the nine courses required for the Ph.D. All students are required to serve as teaching assistants for two quarters.

Students select a thesis advisor and begin laboratory research by the tenth month of the first year. To complete the Ph.D. degree, they must prepare, under the general direction of an appointed doctoral committee, a dissertation based upon their original research. Students are also required to submit, if not publish, at least one first author paper prior to their defense. A public seminar describing the results of the dissertation research must be presented and the dissertation must be successfully defended before the doctoral committee.

### Admissions

For information about applying to our graduate program, please visit our website at http://molbio.bsd.uchicago.edu/index.php.

### MOLECULAR GENETICS & CELL BIOLOGY COURSES

### MGCB 30400. Protein Fundamentals. 100 Units.

The course covers the physical-chemical phenomena that define protein structure and function. Topics include: the principles of protein folding, molecular motion and molecular recognition; protein evolution, design and engineering; enzyme catalysis; regulation of protein function and molecular machines; proteomics and systems biology. Workshop on X-ray Crystallography: The workshop is an addendum to Protein Fundamentals and is required for all BCMB students. This one week workshop will provide students with an intensive introduction to protein structure determination by x-ray crystallography. In addition to lectures, an extensive laboratory component will give students the opportunity to carry out protein crystallization, data collection (at Argonne), structure determination, refinement, model building and validation.

Instructor(s): R. Keenan, S. Koide, J. Piccirilli Terms Offered: Autumn Equivalent Course(s): BCMB 30400, HGEN 30400

# MGCB 31000. Fundamentals of Molecular Biology. 100 Units.

This course covers the structure of genetic material, chromatin, replication, DNA repair and transcription, including its regulation, RNA processing, post-transcriptional regulation, and protein synthesis. Third- or fourth-year standing is required for undergraduates; any graduate student may enroll.

Instructor(s): U. Storb, J. Staley Terms Offered: Winter

Prerequisite(s): For College students: Basic knowledge of genetics and biochemistry Equivalent Course(s): BIOS 21208,BCMB 31000

# MGCB 31200. Molecular Biology-I. 100 Units.

Nucleic acid structure and DNA topology; methodology; nucleic-acid protein interactions; mechanisms and regulation of transcription in eubacteria, and of replication in eubacteria and eukaryotes; mechanisms of genome and plasmid segregation in eubacteria.

Instructor(s): L. Rothman-Denes Terms Offered: Winter

Equivalent Course(s): BCMB 31200, DVBI 31200

# MGCB 31300. Molecular Biology-II. 100 Units.

The content of this course covers the mechanisms and regulation of eukaryotic gene expression at the transcriptional and post-transcriptional levels. Our goal is to explore research frontiers and evolving methodologies. Rather than focusing on the elemental aspects of a topic, the lectures and discussions highlight the most significant recent developments, their implications and future directions.

Instructor(s): J. Staley, A. Ruthenburg Terms Offered: Spring

Equivalent Course(s): BCMB 31300, DVBI 31300

### MGCB 31400. Genetic Analysis of Model Organisms. 100 Units.

Fundamental principles of genetics discussed in the context of current approaches to mapping and functional characterization of genes. The relative strengths and weaknesses of leading model organisms are emphasized via problem-solving and critical reading of original literature.

Instructor(s): A. Palmer, D. Bishop, E. Ferguson, J. Malamy Terms Offered: Autumn Equivalent Course(s): DVBI 31400,BCMB 31400,HGEN 31400

#### MGCB 31500. Genetic Mechanisms. 100 Units.

Advanced coverage of mechanisms involved in promoting genome stability and genome evolution. A variety of experimental systems are explored from bacteriophage to humans. Topics include the genetics and biochemistry of DNA repair, homologous and site-specific recombination, transposition and genome rearrangement. Two of three weekly meetings are lecture and the third student led discussion of recent papers from the primary literature. The course emphasizes experimental design and interpretation of primary data.

Instructor(s): D. Bishop Terms Offered: Spring

Equivalent Course(s): DVBI 31500

# MGCB 31600. Cell Biology I. 100 Units.

Eukaryotic protein traffic and related topics, including molecular motors and cytoskeletal dynamics, organelle architecture and biogenesis, protein translocation and sorting, compartmentalization in the secretory pathway, endocytosis and exocytosis, and mechanisms and regulation of membrane fusion.

Instructor(s): A. Turkewitz, B. Glick Terms Offered: Autumn

Equivalent Course(s): BCMB 31600, DVBI 31600

# MGCB 31700. Cell Biology II. 100 Units.

This course covers the mechanisms with which cells execute fundamental behaviors. Topics include signal transduction, cell cycle progression, cell growth, cell death, cancer biology, cytoskeletal polymers and motors, cell motility, cytoskeletal diseases, and cell polarity. Each lecture will conclude with a dissection of primary literature with input from the students. Students will write and present a short research proposal, providing excellent preparation for preliminary exams.

Instructor(s): M. Glotzer, D. Kovar Terms Offered: Winter

Equivalent Course(s): DVBI 31700

### MGCB 31900. Introduction to Research. 100 Units.

Lectures on current research by departmental faculty and other invited speakers. A required course for all first-year graduate students

Instructor(s): Staff Terms Offered: Autumn, Winter

Equivalent Course(s): BCMB 31900, DVBI 31900, GENE 31900, HGEN 31900

### MGCB 32300. Structure and Function of Membrane Proteins. 100 Units.

This course will be an in depth assessment of the structure and function of biological membranes. In addition to lectures, directed discussions of papers from the literature will be used. The main topics of the courses are: (1) Energetic and thermodynamic principles associated with membrane formation, stability and solute transport (2) membrane protein structure, (3) lipid-protein interactions, (4) bioenergetics and transmembrane transportmechanisms, and (5) specific examples of membrane protein systems and their function (channels, transporters, pumps, receptors). Emphasis will be placed on biophysical approaches in these areas. The primary literature will be the main source of reading.

Instructor(s): E. Perozo Terms Offered: Autumn

Equivalent Course(s): BCMB 32300

# MGCB 34300. Image Processing in Biology. 100 Units.

Whether one is trying to read radio signals from faraway galaxies or to understand molecular structures, it is necessary to understand how to read, interpret, and process the data that contain the desired information. In this course, we learn how to process the information contained in images of molecules as seen in the electron microscope. We also deal with the principles involved in processing electron microscope images, including the underlying analytical methods and their computer implementation.

Instructor(s): R. Josephs Terms Offered: Spring

Prerequisite(s): For College students: One year of calculus

Equivalent Course(s): BIOS 21407

### MGCB 35401. Gene Regulation. 100 Units.

This course covers the fundamental theory of gene expression in prokaryotes and eukaryotes through lectures and readings in the primary literature. Natural and synthetic genetic systems arising in the context of *E. coli* physiology and Drosophila development will be used to illustrate fundamental biological problems together with the computational and theoretical tools required for their solution. These tools include large-scale optimization, image processing, ordinary and partial differential equations, the chemical Langevin and Fokker-Planck equations, and the chemical master equation. A central theme of the class is the art of identifying biological problems which require theoretical analysis and choosing the correct mathematical framework with which to solve the problem.

Terms Offered: Winter

Prerequisite(s): Consent of instructor

Equivalent Course(s): STAT 35400, ECEV 35400

# MGCB 35600. Vertebrate Developmental. 100 Units.

This advanced-level course combines lectures, student presentations, and discussion sessions. It covers major topics on the developmental biology of embryos (e.g. formation of the germ line, gastrulation, segmentation, nervous system development, limb pattering, organogenesis). We make extensive use of the primary literature and emphasize experimental approaches (e.g. classical embryology, genetics, molecular genetics).

Instructor(s): V. Prince, C. Ragsdale. Terms Offered: Spring

Prerequisite(s): For College students: BIOS 20180s or 20190, or AP 5 sequence

Equivalent Course(s): BIOS 21356, DVBI 35600

### MGCB 36100. Plant Development and Molecular Genetics. 100 Units.

Genetic approaches to central problems in plant development will be discussed. Emphasis will be placed on embryonic pattern formation, meristem structure and function, reproduction, and the role of hormones and environmental signals in development. Lectures will be drawn from the current literature; experimental approaches (genetic, cell biological, biochemical) used to discern developmental mechanisms will be emphasized. Graduate students will present a research proposal in oral and written form; undergraduate students will present and analyze data from the primary literature, and will be responsible for a final paper.

Instructor(s): J. Greenberg Terms Offered: Spring

Prerequisite(s): For College students: Completion of the general education requirement in the biological sciences

Equivalent Course(s): BIOS 23299, DVBI 36100, ECEV 32900

# MGCB 36400. Developmental Mechanisms. 100 Units.

This course provides an overview of the fundamental questions of developmental biology, with particular emphasis on the genetic, molecular and cell biological experiments that have been employed to reach mechanistic answers to these questions. Topics covered will include formation of the primary body axes, the role of local signaling interactions in regulating cell fate and proliferation, the cellular basis of morphogenesis, and stem cells.

Instructor(s): E. Ferguson, R. Fehon Terms Offered: Winter

Prerequisite(s): For College students: BIOS 20182, 20192, 20187, or 20235

Equivalent Course(s): BIOS 21237, DVBI 36400



# COMMITTEE ON COMPUTATIONAL NEUROSCIENCE

#### Chair

- Nicholas Hatsopoulos Professors
- Yali Amit, Statistics
- Nicolas Brunel, Statistics
- Jack Cowan, Mathematics
- John Ebersol, Neurology
- Jay Goldberg, Neurobiology, Pharmacology and Physiology
- · John Goldsmith, Linguistics
- · Dorothy Hanck, Medicine
- · Richard Kraig, Neurology
- · Daniel Margoliash, Organismal Biology and Anatomy
- · Martha McClintock, Psychology
- Howard Nusbaum, Psychology
- · Eduardo Perozo, Biochemistry and Molecular Biology
- S. Murray Sherman, Neurobiology
- Steven Shevell, Psychology
- Wim van Drongelen, Pediatrics
- V. Leo Towle, Neurology

**Associate Professors** 

- Melina Hale, Organismal Biology and Anatomy
- Nicholas Hatsopoulos, Organismal Biology and Anatomy
- · Leslie Kay, Psychology

Assistant Professors

- Sliman Bensmaia, Organismal Biology and Anatomy
- David Biron, Physics
- David Freedman, Neurobiology
- · Jason MacLean, Neurobiology
- Stephanie Palmer, Organismal Biology and Anatomy Emeritus
- Joel Pokorny, Ophthalmology and Visual Science

The University of Chicago has a long tradition of innovative research in the neurosciences. K. C. Cole developed the voltage clamp here, Stephen Polyak and C. J. Herrick did pioneering work on the anatomy of the retina and brain, and Jack Cowan and Hugh Wilson were among the first to develop mathematical analyses of the dynamics of cortical neurons using non linear dynamics. This tradition is

continued in the Committee on Computational Neuroscience, which draws on faculty from many departments in all four graduate divisions in the University to create a multidisciplinary program in neuroscience. Computational neuroscience is a relatively new area of inquiry that is concerned with how components of animal and human nervous systems interact to produce behaviors. Using quantitative and modeling methods, the interdisciplinary approach of computational neuroscience seeks to understand the function of the nervous system, natural behaviors and cognitive processes and to design human made devices that duplicate behaviors. Course work in computational neuroscience prepares students for research in neurobiology, psychology, or in the mathematical or engineering sciences. Graduates from this program move to traditional academic careers, to careers in biomedical research or engineering, or to opportunities in the corporate world.

### GRADUATE DEGREES

Students with undergraduate degrees in biology or psychology, any of the quantitative sciences or any of the engineering disciplines are welcome to apply for graduate study. Computational neuroscience is inherently interdisciplinary, and most students doing graduate work in this area will have strengths in one of the relevant areas and weaknesses in others. Program requirements in the committee are designed to correct background deficiencies, so students with uneven backgrounds should not hesitate to apply. A year of college level calculus is an absolute prerequisite. Ideally, applicants should have some collegiate level course work in biology (optimally including an introductory neurobiology course), an introductory psychology course, and some mathematics (such as linear algebra and elementary differential equations) beyond calculus. Students who have not had prior exposure to linear algebra and differential equations may be asked to take appropriate courses in these areas before taking the mathematics sequence within the computational neuroscience curriculum.

### DOCTOR OF PHILOSOPHY

Students seeking the Ph.D. in computational neuroscience must take the nine formal courses in the computational neuroscience curriculum, and enroll for nine quarters of research. The formal courses are typically taken in the first year and arranged into three themes. The neuroscience theme presents the basic concepts and phenomena in neuroscience. The mathematics theme presents the quantitative techniques required for a modern analysis of the nervous system and behavior. The courses in this theme have prior exposure to linear algebra and differential equations as a prerequisite. The computational neuroscience theme illustrates how quantitative methodologies are used to understand neurons and behavior. The courses in this theme have completion of a year of calculus as a prerequisite. Students must complete two laboratory rotations which can be started in the first year. Students can also take graduate courses offered by the Departments of Computer Science, Linguistics, Mathematics, Psychology and Statistics, or from any of the graduate programs in the Division of the Biological Sciences. Please consult the listings elsewhere in these Announcements or on the University of Chicago web page for current lists of such courses. Courses in engineering applications of

computational neuroscience are also available through a limited reciprocal course arrangement with the Department of Biomedical Engineering at the Illinois Institute of Technology. Students must pass a qualifying examination with both written and oral components at the end of their second year. In addition to satisfying course requirements, students must write and defend a dissertation based on original and publishable research. Students are expected to participate in the ongoing computational neuroscience seminar series, as well as occasional workshops, that are conducted during their stay in the program.

### M.D./PH.D. PROGRAM

Students interested in earning both an M.D. and a Ph.D. in computational neuroscience at the University of Chicago can follow one of two routes. The first is to apply to the Medical Science Training Program (MSTP) within the Pritzker School of Medicine. The MSTP training grant provides support for both the M.D. and Ph.D. components of the training. Second, a student in the Pritzker School of Medicine may take a leave of absence from the School of Medicine after the first two, preclinical years of medical training and apply to the Ph.D. program in the normal fashion. The student would then return to finish the two clinical years of medical studies after completing the Ph.D. Several of the preclinical medical school courses may be used as electives in the computational neuroscience Ph.D. program. Students with an undergraduate degree in one of the engineering disciplines can earn an M.D. through the Pritzker School of Medicine and a Ph.D. in Biomedical Engineering through the Department of Biomedical Engineering at the Illinois Institute of Technology (which is located approximately three miles north of the University of Chicago Campus). They are able to emphasize neural engineering in the Biomedical Engineering Ph.D. program and take courses in the Committee on Computational Neuroscience.

# ADMISSION TO GRADUATE PROGRAMS

Admission to the Committee on Computational Neuroscience is coordinated through the Neuroscience Cluster within the Division of the Biological Sciences. The most recent admissions policies, including an on line application, can be viewed at http://gradprograms.bsd.uchicago.edu/. Students preparing an application must submit transcripts of their undergraduate and prior graduate work, recent test scores from the general Graduate Record Exam, and three letters of recommendation under separate cover. Foreign applicants from non English speaking nations must also submit TOEFL scores with their application materials. Applications are due by December 1st for students beginning their studies in the following autumn quarter.

# FINANCIAL AID

Students enrolled in the Ph.D. program receive financial support in the form of a stipend and tuition payments as long as they remain in good standing. Students are encouraged to apply for individual fellowships from the National Science Foundation or other sources.

# RESEARCH OPPORTUNITIES

Unparalleled research opportunities and facilities are available through the facilities and faculty on the University of Chicago campus, at the Argonne National Laboratory, the Illinois Institute of Technology campus and corporate partners. Research interests of faculty in the Committee on Computational Neuroscience can be accessed through the committee web page at http://neuroscience.uchicago.edu/? p=neuro/cns. Ongoing research topics range from work at the molecular level to studies in cognitive neuroscience. These projects involve modern methods of recording and imaging the activities of individual neurons, populations of neurons and human brain regions. Quantitative approaches currently utilized by faculty and students include those derived from non-linear dynamics, large scale simulations of neural activity, time series analysis, and pattern recognition. Research projects address basic problems in neuroscience using approaches that range from molecular neurobiology to cognitive neuroscience, biomedical applications such as the construction of neural prostheses and the control of epilepsy, and technological applications to computational vision and language.

### COMPUTATIONAL NEUROSCIENCE COURSES

### CPNS 30000. Celluar Neurobiology. 100 Units.

This course is concerned with the structure and function of the nervous system at the cellular level. The cellular and subcellular components of neurons and their basic membrane and electrophysiological properties will be described. Cellular and molecular aspects of interactions between neurons will be studied. This will lead to functional analyses of the mechanisms involved in the generation and modulation of behavior in selected model systems.

Instructor(s): C. Hansel and P. Lloyd Terms Offered: Autumn

### CPNS 30107. Behavioral Neuroscience. 100 Units.

This course is concerned with the structure and function of systems of neurons, and how these are related to behavior. Common patterns of organization are described from the anatomical, physiological, and behavioral perspectives of analysis. The comparative approach is emphasized throughout. Laboratories include exposure to instrumentation and electronics, and involve work with live animals. A central goal of the laboratory is to expose students to in vivo extracellular electrophysiology in vertebrate preparations. Laboratories will be attended only on one day a week but may run well beyond the canonical period.

Instructor(s): D. Margoliash Terms Offered: Winter Equivalent Course(s): NURB 30107,PSYC 40107

# CPNS 30116. Survey Systems Neuroscience. 100 Units.

This lab-centered course teaches students the fundamental principles of vertebrate nervous system organization. Students learn the major structures and the basic circuitry of the brain, spinal cord and peripheral nervous system. Somatic, visual, auditory, vestibular and olfactory sensory systems are presented in particular depth. A highlight of this course is that students become practiced at recognizing the nuclear organization and cellular architecture of many regions of brain in rodents, cats and primates.

Instructor(s): C. Hansel, N. Hatsopoulos Terms Offered: Autumn

# CPNS 31000. Mathematical Methods for Biological Sciences I. 100 Units.

This course builds on the introduction to modeling course biology students take in the first year (BIOS 20151 or 152). It begins with a review of one-variable ordinary differential equations as models for biological processes changing with time, and proceeds to develop basic dynamical systems theory. Analytic skills include stability analysis, phase portraits, limit cycles, and bifurcations. Linear algebra concepts are introduced and developed, and Fourier methods are applied to data analysis. The methods are applied to diverse areas of biology, such as ecology, neuroscience, regulatory networks, and molecular structure. The students learn computations methods to implement the models in MATLAB.

Instructor(s): D. Kondrashov Terms Offered: Autumn. L

Prerequisite(s): BIOS 20151 or BIOS 20152 or consent of the instructor

Equivalent Course(s): BIOS 26210, PSYC 36210

# CPNS 31100. Mathematical Methods for Biological Sciences II. 100 Units.

This course is a continuation of BIOS 26210. The topics start with optimization problems, such as nonlinear least squares fitting, principal component analysis and sequence alignment. Stochastic models are introduced, such as Markov chains, birth-death processes, and diffusion processes, with applications including hidden Markov models, tumor population modeling, and networks of chemical reactions. In computer labs, students learn optimization methods and stochastic algorithms, e.g. Markov Chain Monte Carlo and Gillespie algorithm. Students complete an independent project on a topic of their interest.

Instructor(s): D. Kondrashov Terms Offered: Winter. L.

Prerequisite(s): BIOS 26210

Equivalent

Equivalent Course(s): BIOS 26211, PSYC 36211

### CPNS 31358. Simulation, Modeling, and Computation in Biophysics. 100 Units.

This course develops skills for modeling biomolecular systems. Fundamental knowledge covers basic statistical mechanics, free energy, and kinetic concepts. Tools include molecular dynamics and Monte Carlo simulations, random walk and diffusion equations, and methods to generate random Gaussian and Poisson distributors. A term project involves writing a small program that simulates a process. Familiarity with a programming language or Mathlab would be valuable. Instructor(s): B. Roux Terms Offered: Spring

Prerequisite(s): BIOS 20200 and Bios 26210-26211, or consent from instructor Equivalent Course(s): BIOS 21358,BCMB 31358

# CPNS 32110. Signal Analysis and Modeling for Neuroscientists. 100 Units.

The course provides an introduction into signal analysis and modeling for neuroscientists. We cover linear and nonlinear techniques and model both single neurons and neuronal networks. The goal is to provide students with the mathematical background to understand the literature in this field, the principles of analysis and simulation software, and allow them to construct their own tools. Several of the 90-minute lectures include demonstrations and/or exercises in Matlab.

Instructor(s): W. van Drongelen Terms Offered: Spring

Prerequisite(s): BIOS 26210 and 26211, or consent of instructor.

Note(s): This course meets requirements for the biological sciences major only for students specializing in neuroscience.

Equivalent Course(s): BIOS 29408

# CPNS 33200. Computational Approaches for Cognitive Neuroscience. 100 Units.

This course is concerned with the relationship of the nervous system to higher order behaviors such as perception and encoding, action, attention, and learning and memory. Modern methods of imaging neural activity are introduced, and information theoretic methods for studying neural coding in individual neurons and populations of neurons are discussed.

Instructor(s): N. Hatsopoulos Terms Offered: Spring

Prerequisite(s): BIOS 24222 or CPNS 33100 Equivalent Course(s): PSYC 34410,ORGB 34650

### CPNS 34206. Peering Inside the Black Box: Neocortex. 100 Units.

The neocortex is the multilayered outermost structure of the mammalian brain. It is the site of higher brain functions including reasoning and creativity. However, the complexity of the neocortex it is comprised of ~ 20 billion neurons which have 0.15 quadrillion connections between them seems to preclude any hope of achieving a fundamental understanding the system. Recent technological innovations have opened novel avenues of investigation making realization of the neocortex an increasingly tractable problem. This course will place particular emphasis on how to critically read scientific papers as we evaluate and discuss current experimental approaches to the neocortex. Integral to this evaluation will be the detailed discussion of the latest technological approaches.

Instructor(s): J. MacLean Terms Offered: Autumn Prerequisite(s): BIOS 24205 or consent of instructor.

Equivalent Course(s): BIOS 24206

### CPNS 34231. Methods in Computational Neuroscience. 100 Units.

Topics include (but are not limited to): Hodgkin-Huxley equations, Cable theory, Single neuron models, Information theory, Signal Detection theory, Reverse correlation, Relating neural responses to behavior, and Rate vs. temporal codes. Instructor(s): S. Bensmaia, L. Osborne, J. MacLean, D. Freedman Terms Offered: Winter I

Prerequisite(s): BIOS 26210 and BIOS 26211 which must be taken concurrently, or consent of instructor.

Equivalent Course(s): BIOS 24231

# CPNS 34600. Neurobiology of Disease I. 100 Units.

Instructor(s): C. Gomez Terms Offered: Winter

### CPNS 34700. Neurobiology of Disease II. 100 Units.

This seminar course is devoted to understanding pathogenic mechanisms of neuronal death, neurodegenerative disease, and neuronal repair. Weekly seminars are given by experts in the basic and clinical aspects of neurodegenerative diseases. For each lecture, students are provided with a brief description of clinical and pathological features of a given set or mechanistic category of neurodegenerative diseases that is followed by a more detailed description of the current status of knowledge of several of the prototypical pathogenic mechanisms.

Instructor(s): C. Gomez, Staff Terms Offered: Spring

Prerequisite(s): BIOS 24246

Equivalent Course(s): BIOS 24247, NURB 34700

# CPNS 35500. Theoretical Neuroscience: Dynamics of Neurons and Networks. 100 Units.

This course will introduce students to basic models of neurons and neural networks. It will cover basic mathematical tools that are useful to analyze such models. The course will start by models of single neurons and synapses. It will then move to network models, and describe how external inputs, single neuron and synaptic dynamics shape the collective dynamics at the network level in various types of network architectures. The last part of the course will focus on how learning shapes the dynamics at the neuron and network levels.

Prerequisite(s): Consent of instructor

Note(s): In 2013-14, the material will be offered as a two-course sequence: 42510 Theoretical Neuroscience: Single Neuron Dynamics and Computation (in Autumn), followed by 42520 Theoretical Neuroscience: Network Dynamics and Computation (in Winter).

Equivalent Course(s): STAT 42500

# CPNS 35600. Theoretical Neuroscience: Statistics and Information Theory. 100 Units.

This course will introduce students to basic models of neurons and neural networks. It will cover basic mathematical tools that are useful to analyze such models. The course will start by models of single neurons and synapses. It will then move to network models, and describe how external inputs, single neuron and synaptic dynamics shape the collective dynamics at the network level in various types of network architectures. The last part of the course will focus on how learning shapes the dynamics at the neuron and network levels.

Terms Offered: Spring. Prerequisite(s): CPNS 35500 Equivalent Course(s): STAT 42600



# COMMITTEE ON DEVELOPMENT, REGENERATION, AND STEM CELL BIOLOGY

#### Chair

• Edwin L. Ferguson

### **Professors**

- John Cunningham, Pediatrics
- Glyn Dawson, Pediatrics
- Wei Du, Ben May Institute for Cancer Research
- Richard Fehon, Molecular Genetics & Cell Biology
- Edwin L. Ferguson, Molecular Genetics & Cell Biology
- Yoav Gilad, Human Genetics
- Michael Glotzer, Molecular Genetics and Cell Biology
- · Elizabeth Grove, Neurobiology
- Robert Haselkorn, Molecular Genetics & Cell Biology
- · Robert K. Ho, Organismal Biology & Anatomy
- Bruce Lahn, Human Genetics
- Elizabeth McNally, Medicine
- Victoria E. Prince, Organismal Biology & Anatomy
- Ilaria Rebay, Ben May Institute for Cancer Research
- Marsha Rosner, Ben May Institute for Cancer Research
- Nancy B. Schwartz, Pediatrics
- Neil H. Shubin, Organismal Biology & Anatomy
- Kevin White, Human Genetics Associate Professors
- William Green, Neurobiology
- · Akira Imamoto, Ben May Institute for Cancer Research
- Barbara Kee, Pathology
- David Kovar, Molecular Genetics & Cell Biology
- · Kay MacLeod, Ben May Institute for Cancer Research
- · Jocelyn Malamy, Molecular Genetics & Cell Biology
- Ivan Moskowitz, Pediatrics
- Clifton Ragsdale, Neurobiology
- Ilya Ruvinsky, Ecology & Evolution
- Urs Schmidt Ott, Organismal Biology & Anatomy Assistant Professors

- Jill de Jong, Pediatrics
- Sally Horne-Badovinac, Molecular Genetics and Cell Biology
- Ed Munro, Molecular Genetics & Cell Biology
- Xiaoyang Wu, Ben May Institute for Cancer Research Emeritus Faculty
- · Martin Gross, Pathology
- Anthony Mahowald, Molecular Genetics & Cell Biology
- Manfred D.E. Ruddat, Ecology & Evolution

# Program of Study

#### First Year

The first year of graduate study is spent in coursework, independent reading, and exploratory research. The number of courses constituting a full schedule for each quarter of the first year will vary, but typically includes three lecture courses or two lecture courses and a research rotation. Students are required to undertake laboratory rotations in at least two different laboratories before beginning their dissertation research. Three rotations are encouraged. These rotations can be performed during the first academic year or during Summer Quarter.

Seminars given by invited speakers are regularly offered and students are strongly urged to attend. A separate series of meetings is presented in the fall and winter quarters by faculty to introduce students to their research. Before beginning their second year, students complete Part I of the candidacy examinations, which consists of an oral examination covering the core courses in developmental, cell, and molecular biology, and genetics.

### Second year

While coursework can continue during the second year, students spend much of their time developing a research project. Students have generally chosen research advisors by the beginning of the second year. By the end of Winter Quarter of the second year, each student's doctoral committee is named. The student then prepares a written proposal for dissertation research and defends this proposal before the doctoral committee. This defense constitutes Part II of the candidacy examination. This examination must be completed by the end of Spring Quarter of the second academic year.

### Advanced years

After the qualifying exam, the student works full time on thesis research, although the faculty urges students to continue to take advantage of the advanced courses and seminars that are offered. Finally, each graduating student writes a dissertation describing his or her research, presents the work in a public seminar, and defends it before their doctoral committee.

### **Evaluation**

Throughout their term as graduate students, students are expected to have frequent informal conversations with professors in their courses, their research

advisor, and members of their doctoral committees. In this way, students can obtain frequent appraisals of their progress and constructive advice.

Formal evaluation of each student's progress continues every academic year. In the first and second years, the evaluation is based on the student's performance in courses, laboratory rotations and the qualifying examination. In later years, the research advisor and doctoral committee oversee the student's dissertation research progress; a report is submitted after the yearly meeting that becomes part of the student's permanent file. If there are any deficiencies in performance, the student will receive a letter describing those deficiencies and making suggestions about how to remedy them.

### Admissions

For information about applying to our graduate program, please visit our website at http://molbio.bsd.uchicago.edu/index.php.

# Requirements for the Ph.D. Degree

A Ph.D. candidate must fulfill certain formal course work requirements, pass the qualifying examination, and present a satisfactory dissertation describing the results of original research.

The committee expects a knowledge of and proficiency in contemporary developmental biology as well as auxiliary fields of molecular biology, cell biology, and genetics. This requirement will normally be met by fulfilling the formal course work listed below. However, courses taken at other institutions, in other departments, or as part of the medical school curriculum may substitute for required committee courses with the approval of the curriculum committee.

#### Formal Course Work

The Division of the Biological Sciences requirement of nine graded course units may be met by registering for a combination of formal courses and laboratory rotations. During the first year of graduate work students ordinarily complete one course in molecular biology, one in cell biology, one in genetics, and three courses in developmental biology.

# DEVELOPMENTAL BIOLOGY COURSES

### DVBI 32500. Evolutionary Aspects of Gene Regulation. 100 Units.

This advanced level course focuses on reading and participation. Each meeting period is dedicated to a new Topic, several of which make up a Module. Typical modules are: Transcription factors and cis-regulatory elements, Functional consequences of regulatory changes and microRNAs as a mechanism of gene regulation. Students present and discuss several papers from the primary literature during this course.

Instructor(s): I. Ruvinsky Terms Offered: Winter Equivalent Course(s): ECEV 32500,BIOS 23281

### DVBI 35600. Vertebrate Developmental. 100 Units.

This advanced-level course combines lectures, student presentations, and discussion sessions. It covers major topics on the developmental biology of embryos (e.g. formation of the germ line, gastrulation, segmentation, nervous system development, limb pattering, organogenesis). We make extensive use of the primary literature and emphasize experimental approaches (e.g. classical embryology, genetics, molecular genetics).

Instructor(s): V. Prince, C. Ragsdale. Terms Offered: Spring

Prerequisite(s): For College students: BIOS 20180s or 20190, or AP 5 sequence Equivalent Course(s): BIOS 21356,MGCB 35600

# DVBI 36100. Plant Development and Molecular Genetics. 100 Units.

Genetic approaches to central problems in plant development will be discussed. Emphasis will be placed on embryonic pattern formation, meristem structure and function, reproduction, and the role of hormones and environmental signals in development. Lectures will be drawn from the current literature; experimental approaches (genetic, cell biological, biochemical) used to discern developmental mechanisms will be emphasized. Graduate students will present a research proposal in oral and written form; undergraduate students will present and analyze data from the primary literature, and will be responsible for a final paper.

Instructor(s): J. Greenberg Terms Offered: Spring

Prerequisite(s): For College students: Completion of the general education requirement in the biological sciences

Equivalent Course(s): BIOS 23299, ECEV 32900, MGCB 36100

### DVBI 36200. Stem Cells and Regeneration. 100 Units.

This course will focus on current literature in the fields of stem cell biology and regeneration. The curriculum will focus both on basic biology of stem cells and regeneration, and on biomedically relevant recent findings with the potential to translate to the clinic. We will cover embryonic and induced pluripotent stem cells, as well as adult stem cells from a variety of systems, both invertebrate and vertebrates.

Instructor(s): E. Ferguson, V. Prince, J. Cunningham, J. De Jong, X. Wu Terms Offered: Autumn

Prerequisite(s): For College students: Completion of a Biological Sciences Fundamentals Sequence.

Equivalent Course(s): BIOS 21416

### DVBI 36400. Developmental Mechanisms. 100 Units.

This course provides an overview of the fundamental questions of developmental biology, with particular emphasis on the genetic, molecular and cell biological experiments that have been employed to reach mechanistic answers to these questions. Topics covered will include formation of the primary body axes, the role of local signaling interactions in regulating cell fate and proliferation, the cellular basis of morphogenesis, and stem cells.

Instructor(s): E. Ferguson, R. Fehon Terms Offered: Winter

Prerequisite(s): For College students: BIOS 20182, 20192, 20187, or 20235

Equivalent Course(s): BIOS 21237,MGCB 36400

### **DISTRIBUTION COURSES**

### DVBI 31200. Molecular Biology-I. 100 Units.

Nucleic acid structure and DNA topology; methodology; nucleic-acid protein interactions; mechanisms and regulation of transcription in eubacteria, and of replication in eubacteria and eukaryotes; mechanisms of genome and plasmid segregation in eubacteria.

Instructor(s): L. Rothman-Denes Terms Offered: Winter

Equivalent Course(s): MGCB 31200,BCMB 31200

### DVBI 31300. Molecular Biology-II. 100 Units.

The content of this course covers the mechanisms and regulation of eukaryotic gene expression at the transcriptional and post-transcriptional levels. Our goal is to explore research frontiers and evolving methodologies. Rather than focusing on the elemental aspects of a topic, the lectures and discussions highlight the most significant recent developments, their implications and future directions.

Instructor(s): J. Staley, A. Ruthenburg Terms Offered: Spring

Equivalent Course(s): MGCB 31300, BCMB 31300

### DVBI 31400. Genetic Analysis of Model Organisms. 100 Units.

Fundamental principles of genetics discussed in the context of current approaches to mapping and functional characterization of genes. The relative strengths and weaknesses of leading model organisms are emphasized via problem-solving and critical reading of original literature.

Instructor(s): A. Palmer, D. Bishop, E. Ferguson, J. Malamy Terms Offered: Autumn Equivalent Course(s): BCMB 31400,HGEN 31400,MGCB 31400

### DVBI 31500. Genetic Mechanisms. 100 Units.

Advanced coverage of mechanisms involved in promoting genome stability and genome evolution. A variety of experimental systems are explored from bacteriophage to humans. Topics include the genetics and biochemistry of DNA repair, homologous and site-specific recombination, transposition and genome rearrangement. Two of three weekly meetings are lecture and the third student led discussion of recent papers from the primary literature. The course emphasizes experimental design and interpretation of primary data.

Instructor(s): D. Bishop Terms Offered: Spring

Equivalent Course(s): MGCB 31500

# DVBI 31600. Cell Biology I. 100 Units.

Eukaryotic protein traffic and related topics, including molecular motors and cytoskeletal dynamics, organelle architecture and biogenesis, protein translocation and sorting, compartmentalization in the secretory pathway, endocytosis and exocytosis, and mechanisms and regulation of membrane fusion.

Instructor(s): A. Turkewitz, B. Glick Terms Offered: Autumn

Equivalent Course(s): MGCB 31600, BCMB 31600

# DVBI 31700. Cell Biology II. 100 Units.

This course covers the mechanisms with which cells execute fundamental behaviors. Topics include signal transduction, cell cycle progression, cell growth, cell death, cancer biology, cytoskeletal polymers and motors, cell motility, cytoskeletal diseases, and cell polarity. Each lecture will conclude with a dissection of primary literature with input from the students. Students will write and present a short research proposal, providing excellent preparation for preliminary exams. Instructor(s): M. Glotzer, D. Kovar Terms Offered: Winter

Equivalent Course(s): MGCB 31700



# DEPARTMENT OF ECOLOGY AND EVOLUTION

### Chair

- Joy Bergelson Professors
- Joy Bergelson
- Jerry Coyne
- Richard R. Hudson
- Martin Kreitman
- Manyuan Long
- Catherine Pfister
- Trevor D. Price
- John Reinitz, Statistics
- · Joseph Thornton
- Kevin White, Human Genetics
- J. Timothy Wootton
- Chung-I Wu Associate Professors
- · Gregory Dwyer
- Jack Gilbert (part-time)
- Stephen Pruett-Jones
- Ilya Ruvinsky

**Assistant Professors** 

- Stefano Allesina
- Sarah Cobey
- Marcus Kronforst
   Emeritus Faculty
- Wen-Hsiung Li
- · Thomas Nagylaki
- Manfred D.E. Ruddat
- Janice B. Spofford

Research Associate

Michael Z. Ludwig

# DEPARTMENT OF ECOLOGY AND EVOLUTION

The Department of Ecology and Evolution provides training for research and teaching in the ecology, evolution and behavior of whole organisms, at the levels of the organism, the population, and the ecosystem. The research interests of our

faculty include molecular evolution, population genetics, quantitative genetics, animal behavior, plant and animal ecology, evolutionary theory, systematics, paleontology, and related subjects. Individual levels of study range from molecules to communities. A common theme is the conduct of studies in a rigorous ecological and conceptual context, and the faculty share an interest in the architecture of populations, species and communities.

The department stresses scientific breadth and the interrelations between various specialized fields. Students are encouraged to approach basic biological problems with the most appropriate techniques: biophysical, biochemical, mathematical, physiological, or organismal. Departmental laboratories are equipped for a wide variety of contemporary research methods. Courses in other programs may be taken for credit in ecology and evolution for example, in the Departments of Organismal Biology and Anatomy, Biochemistry and Molecular Biology, Molecular Genetics and Cell Biology, Statistics, Geophysical Sciences, Anthropology, and Chemistry. Many students in the Department of Ecology and Evolution participate in interdepartmental programs in genetics, cell biology, developmental biology, population biology, theoretical biology, and evolutionary biology, and in these programs dissertation research may be co-sponsored by faculty from different departments. Collaboration is also maintained with the Field Museum and the Shedd Aquarium for students interested in research in systematics, taxonomy, and evolutionary biology, and with the Brookfield Zoo for basic research in conservation and behavior involving zoo animals. Possibilities also exist for field studies in Central America, Africa, and other regions of the earth.

# PROGRAM OF STUDY

Most students in the Department of Ecology and Evolution complete their Ph.D. program in about five years, though students entering with a master's degree may finish in slightly less time. A student advisory committee advises all incoming and second year students on academic and research concerns. The first and second years consist largely of course work and individual reading courses, aiming toward successful completion of an oral general knowledge examination by the spring quarter of the first year, supervised by the student advisory committee. The student and faculty advisor in consultation with the department chair, then choose a five member faculty doctoral committee, scheduling a defense of the dissertation research proposal by the end of the second year of study. Work in subsequent years shifts to dissertation centered research and, finally, preparation and defense of the Ph.D. dissertation. All students are required to register to be a supervised teaching assistant in two approved courses during their tenure in the doctoral program. While there is no master's degree program in the department, students may elect to receive the S.M. degree upon successful completion of their dissertation proposal defense.

# **ENTRANCE REQUIREMENTS**

Entering students are expected to have received a broad undergraduate training in biology, and a good background in related quantitative subjects, such as chemistry, statistics and calculus. Students who are admitted without having fully

satisfied these requirements will be required to remedy their deficiencies by taking appropriate courses during their first two years in the graduate program.

# GENERAL KNOWLEDGE EXAMINATION

Each first year student will be expected to pass an oral general knowledge examination during the first year of study, generally no later than the 10th week of the spring quarter. This examination session shall be attended by all three members of an examination committee appointed by the student advisory committee. The goal of the examination will be to assess each student's general knowledge of key concepts, processes and issues in ecology and evolutionary biology, as covered in the courses recommended to the student by the student advisory committee during the student's first year in the program.

# DISSERTATION PROPOSAL DEFENSE

This examination consists of the submission of a written Ph.D. research proposal and an oral presentation of the proposal in a public or closed/private seminar format, followed by a closed discussion and examination on the proposal presentation with the faculty committee chosen by the student and the chair of the department. Students are expected to schedule the dissertation proposal defense before the end of their second year.

# DOCTOR OF PHILOSOPHY

Upon successful completion of the dissertation proposal defense and admission into candidacy for the Ph.D., students work closely with the faculty advisor and dissertation committee on the dissertation project. During the period of two to three years in which students do primary original research, they also participate in seminars, discussion groups, and professional meetings and conferences, leading to the completion of the written Ph.D. dissertation. The Ph.D. in ecology and evolution is awarded based upon:

- Submission of a written dissertation based on original research, which must be approved by the faculty adviser and dissertation committee.
- Presentation of a public seminar based on the dissertation research.
- Following the public seminar, successful performance during an oral examination by the dissertation committee and other relevant faculty.
- Acceptance of the approved written dissertation by the University Dissertation
   Office in compliance with that office's regulations.

### APPLICATION

We strongly advise students considering application to the department to begin preparation of their application early in the autumn quarter, so that all materials will arrive by the December 1 deadline. The department requires GRE General Test scores from all applicants, and recommends submission of GRE subject test scores in biology. Foreign applicants whose first language is not English also must submit TOEFL test scores with their application materials.

Further information also may be obtained from the department's home page at http://pondside.uchicago.edu/ecol-evol/

### **ECOLOGY AND EVOLUTION COURSES**

# ECEV 31100. Evolution of Biological Molecules. 100 Units.

The course connects evolutionary changes imprinted in genes and genomes with the structure, function and behavior of the encoded protein and RNA molecules. Central themes are the mechanisms and dynamics by which molecular structure and function evolve, how protein/RNA architecture shapes evolutionary trajectories, and how patterns in present-day sequence can be interpreted to reveal the interplay data of evolutionary history and molecular properties. Core concepts in macromolecule biochemistry (folding and stability of proteins and RNA, structure-function relationships, kinetics, catalysis) and molecular evolution (selection, mutation, drift, epistasis, effective population size, phylogenetics) will be taught, and the interplay between them explored.

Instructor(s): A. Drummond, J. Thornton Terms Offered: Winter Prerequisite(s): Comfort with basic computer programming (course will use Python and R); undergraduate biology, chemistry, calculus, and introductory statistics. Equivalent Course(s): HGEN 31100,BCMB 31100

# ECEV 31500. Ecological Genetics. 100 Units.

A graduate class in ecological genetics (evolution of the phenotype, without considering molecular approaches). This will be a weekly 2-hour seminar, emphasizing quantitative genetic approaches. Basic theory will cover such topics as heritability and breeding value, genetic correlation, Price's theorem and sexual selection. Seminars will include discussions of current topics from the literature. Instructor(s): T. Price Terms Offered: Autumn 2014

Equivalent Course(s): EVOL 31500

ECEV 31800. Cancer Biology 6: Cancer Genomics and Systems Biology. 100 Units. Cancer is a genetic disease characterized by the complex actions and interactions of environmental factors, multiple inherited and acquired genetic factors, networks, and cells. Together, they predispose some individuals to develop cancer, protect others against it despite lifelong exposures to carcinogens, and determine the likelihood of response to therapy. This inherent complexity presents constant challenges for diagnosing and treating patients with cancer. Until recently, it has not been possible to explore the myriad genetic and biological factors varying among individuals that may account for the differences in susceptibility to cancer, the response to treatment, and the trajectory of disease. With the advent of new genome-wide and high-throughput technologies, we are now beginning to unravel the genetic underpinnings of cancer. A systems biology approach towards cancer examines the many components of the disease simultaneously. It is hoped that findings resulting from systems biology studies will form the foundation for "personalized medicine." The goal of this course is to teach students to manipulate and analyze the enormous datasets generated by genome-wide platforms. The course is divided into four modules, each of which is dedicated to an in depth exploration of a single platform: 1) genome-wide association studies (GWAS); 2) next-generation sequencing 3) systems analysis of proteins; and 4) integrated data analysis. Modules are comprised of both lectures and labs, and for each module, there is a student-led presentation of seminal papers demonstrating the translational potential of each technology to the investigation of human disease. Although the focus of the course is cancer, the course has relevance to students interested in using systems biology strategies to investigate a variety of complex diseases. The course is complementary and non-overlapping with material covered by other Cancer Biology courses.

Instructor(s): K. Onel, A. Skol, R. Jones Terms Offered: Autumn Equivalent Course(s): CABI 31800

# ECEV 32000. Introduction to Scientific Computing for Biologists. 100 Units.

The course will cover basic concepts in computing for an audience of biology graduate students. The students will receive basic training in the use of version control systems, databases and regular expressions. They will learn how to program in python and R and how to use R to produce publication-grade figures for their manuscripts, and how to typeset scientific manuscripts and theses using LaTeX. All the examples and exercises will be biologically motivated and will make use of real data. The approach will be hands-on, with lecturing followed by exercises in class. Instructor(s): S. Allesina Terms Offered: Winter

# ECEV 32900. Plant Development and Molecular Genetics. 100 Units.

Genetic approaches to central problems in plant development will be discussed. Emphasis will be placed on embryonic pattern formation, meristem structure and function, reproduction, and the role of hormones and environmental signals in development. Lectures will be drawn from the current literature; experimental approaches (genetic, cell biological, biochemical) used to discern developmental mechanisms will be emphasized. Graduate students will present a research proposal in oral and written form; undergraduate students will present and analyze data from the primary literature, and will be responsible for a final paper.

Instructor(s): J. Greenberg Terms Offered: Spring

Prerequisite(s): For College students: Completion of the general education requirement in the biological sciences

Equivalent Course(s): BIOS 23299, DVBI 36100, MGCB 36100

### ECEV 34500. Advanced Topics in Evolution. 100 Units.

While evolution by natural selection is an elegantly simple phenomenon, modern research in evolutionary biology contains a variety of controversial, and sometimes confusing, topics. In this course, we will explore, as a group, a select list of controversial or confusing topics in evolutionary biology through a mix of student-led presentations and discussion of the primary literature. Each student will also write a review paper about his or her selected topic.

Instructor(s): M. Kronforst Terms Offered: Spring

### ECEV 35400. Gene Regulation. 100 Units.

This course covers the fundamental theory of gene expression in prokaryotes and eukaryotes through lectures and readings in the primary literature. Natural and synthetic genetic systems arising in the context of *E. coli* physiology and Drosophila development will be used to illustrate fundamental biological problems together with the computational and theoretical tools required for their solution. These tools include large-scale optimization, image processing, ordinary and partial differential equations, the chemical Langevin and Fokker-Planck equations, and the chemical master equation. A central theme of the class is the art of identifying biological problems which require theoretical analysis and choosing the correct mathematical framework with which to solve the problem.

Terms Offered: Winter

Prerequisite(s): Consent of instructor

Equivalent Course(s): STAT 35400,MGCB 35401

### ECEV 35600. Principles of Population Genetics-1. 100 Units.

Examines the basic theoretical principles of population genetics, and their application to the study of variation and evolution in natural populations. Topics include selection, mutation, random genetic drift, quantitative genetics, molecular evolution and variation, the evolution of selfish genetic systems, and human evolution

Instructor(s): R. Hudson Terms Offered: Winter

Equivalent Course(s): EVOL 35600

# ECEV 35901. Genomic Evolution: The Gene Origination Problem. 100 Units.

This course is a summary and analysis for a rapidly growing area of genomic evolution in recent years: Origin and evolution of new genes. We will review major scientific problems related to origination and evolution of new genes, ranging from the mechanistic processes that create new genes, to the rates and patterns of new gene origination, to the evolutionary forces acting on the new genes and to the impacts of the new genes on phenotypic evolution. While hundreds of research articles are discussed and, more importantly, the potential new research problems will be raised and evaluated for the further understanding. Relevant criticisms and new ideas to the new gene evolution are encouraged to present and discussed. Instructor(s): M. Long Terms Offered: Autumn

# ECEV 36100. Evolution by Gene Interaction: The Data and Graphic Theories. 100 Units.

This course is a summary and analysis for a general problem in molecular evolution: how does gene interaction evolves? With the advent of various genomic techniques, gigantic amount of gene interaction data have been published. We will be focused on the gene expression networks, summarizing the technology to decipher the gene networks and major findings of evolution of gene networks. Theoretical problems will be emphasized on how topology is defined and interpreted and how the stability of gene networks is maintained. The application of theoretical results to the problems of molecular evolution will be discussed. The relevant basic elements of graph theory and quantitative description of interaction systems will be introduced and discussed. A particular interest is the discussion of how new genes are integrated into an ancestral gene network and rewire the networks. Instructor(s): M. Long, C-I. Wu Terms Offered: Spring

### ECEV 36900. Topics in Paleobiology. 100 Units.

In this seminar we investigate paleobiological or multidisciplinary topics of current interest to students and faculty. Previous subjects include the origin of phyla, historical and macro-ecology, the stratigraphic record and evolutionary patterns, and climate and evolution.

Instructor(s): D. Jablonski, S. Kidwell, T. Price Terms Offered: Autumn Equivalent Course(s): EVOL 31900, GEOS 36900

### ECEV 37500. Sexual Selection. 100 Units.

A discussion and critical analysis of sexual selection. The course will consist of lectures, reading and discussion.

Instructor(s): S. Pruett-Jones Terms Offered: Winter

Prerequisite(s): Common Core Biology, BIOS 248, or consent of instructor.

Equivalent Course(s): EVOL 37500

### ECEV 40100. Grants, Publications and Professional Issues. 100 Units.

Covers professional topics in evolutionary biology, primarily strategies in grant writing and review. Each student will work towards the submission of an application of their choice. The course meets weekly and involves extensive writing and discussion.

Instructor(s): J. Bergelson, R. Ho, M. Coates Terms Offered: Autumn

Note(s): Only open to first year graduate students in the Darwinian Sciences Cluster Equivalent Course(s): EVOL 40100,ORGB 40100

### ECEV 42600. Community Ecology. 100 Units.

Lectures and readings cover advanced topics in multi-species systems, and include an introduction to basic theoretical approaches.

Instructor(s): J.T. Wootton Terms Offered: Autumn

Equivalent Course(s): EVOL 42600

### ECEV 42800. Population Ecology. 100 Units.

A lecture course on the empirical and theoretical approaches to the study of natural populations, including field methodologies and quantitative approaches. Includes computer assignments.

Instructor(s): C. Pfister Terms Offered: Winter

Equivalent Course(s): EVOL 42800

### ECEV 42900. Theoretical Ecology. 100 Units.

An introduction to mathematical modeling in ecology. The course will begin with linear growth and Lotka-Volterra models, and proceed to partial differential equations. The course's perspective will emphasize numerical computations and fitting models to data.

Instructor(s): G. Dwyer, S. Cobey Terms Offered: Winter

Equivalent Course(s): EVOL 42900

# ECEV 44001. Molecular Evolution I: Fundamentals and Principles. 100 Units.

The comparative analysis of DNA sequence variation has become an important tool in molecular biology, genetics, and evolutionary biology. This course covers major theories that form the foundation for understanding evolutionary forces that govern molecular variation, divergence, and genome organization. Particular attention is given to selectively neutral models of variation and evolution, and to alternative models of natural selection. The course provides practical information on accessing genome databases, searching for homologous sequences, aligning DNA and protein sequences, calculating sequence divergence, producing sequence phylogenies, and estimating evolutionary parameters.

Instructor(s): M. Kreitman L. Terms Offered: Winter

Prerequisite(s): Two quarters of biology and calculus, or consent of instructor

Equivalent Course(s): BIOS 23258, EVOL 44001

#### ECEV 44200. Bioinformatics and Microbial Ecology. 100 Units.

We will explore the application of sequencing data treatment and statistical analysis to explore ecology and biodiversity in microbial ecosystems. The course will explore metagenomic principles and bioinformatic techniques. The course will be different to most in that the class will be split into two small groups, each will be given a novel dataset and will be asked to produce a publishable paper. We will then work to submit the paper following the completion of the course. Essentially, following 4 weeks of lectures on techniques, application and theory, we will start to work on real data to solve real problems. Students will be graded on 1 mid term paper, and on the quality of the final group manuscript aimed for publication.

Instructor(s): J. Gilbert Terms Offered: Spring

Prerequisite(s): An interest in sequence data and no fear of computers.

#### ECEV 44300. Evolutionary and Medical Genomics. 100 Units.

Instructor(s): C-I. Wu, K. Onel Equivalent Course(s): CABI 44300



# COMMITTEE ON EVOLUTIONARY BIOLOGY

#### Chair

- Michael Coates
   Associate Chair
- Shannon Hackett Faculty
- Kenneth Angielczyk, Field Museum
- John Bates, Field Museum
- Joy Bergelson, Ecology and Evolution
- Rüdiger Bieler, Field Museum
- Michael Coates, Organismal Biology and Anatomy
- Jerry Coyne, Ecology and Evolution
- · Martin Feder, Organismal Biology and Anatomy
- Michael J. Foote, Geophysical Sciences
- · Lance Grande, Field Museum
- Shannon Hackett, Field Museum
- · Lawrence Heaney, Field Museum
- Patrick Herendeen, Chicago Botanic Garden
- Andrew Hipp, Morton Arboretum/Herbarium
- Robert Ho, Organismal Biology and Anatomy
- David Jablonski, Geophysical Sciences
- Susan M. Kidwell, Geophysical Sciences
- Michael LaBarbera, Organismal Biology and Anatomy
- Robert Lacy, Brookfield Zoo
- Scott Lidgard, Field Museum
- Manyuan Long, Ecology and Evolution
- Thorston Lumbsch, Field Museum
- Vincent J. Lynch, Human Genetics
- Zhe-Xi Luo, Organismal Biology and Anatomy
- Dario Maestripieri, Comparative Human Development
- Peter Makovicky, Field Museum
- Robert D. Martin, Field Museum
- Jill Mateo, Comparative Human Development
- Martha McClintock, Psychology
- R. Michael Miller, Argonne National Laboratory
- Corrie Moreau, Field Museum

- Gregory M. Mueller, Chicago Botanic Garden
- Salikoko Mufwene, Linguistics
- Bruce Patterson, Field Museum
- Catherine Pfister, Ecology and Evolution
- Trevor Price, Ecology and Evolution
- · Victoria Prince, Organismal Biology and Anatomy
- · Stephen Pruett-Jones, Ecology and Evolution
- · Clifton Ragsdale, Neurobiology
- · Richard Ree, Field Museum
- Olivier Rieppel, Field Museum
- Callum Ross, Organismal Biology and Anatomy
- Ilya Ruvinsky, Ecology and Evolution
- Rachel Santymire, Lincoln Park Zoo
- Urs Schmidt-Ott, Organismal Biology and Anatomy
- Paul Sereno, Organismal Biology and Anatomy
- · Neil Shubin, Organismal Biology and Anatomy
- · Petra Sierwald, Field Museum
- Douglas Stotz, Field Museum
- Margaret Thayer, Field Museum
- Russell Tuttle, Anthropology
- · Janet Voight, Field Museum
- Jason Watters, Brookfield Zoo
- Mark Webster, Geophysical Sciences
- · Mark Westneat, Field Museum
- John Timothy Wootton, Ecology and Evolution
- Chung I Wu, Ecology and Evolution Emeritus Faculty
- Stuart Altmann, Ecology and Evolution
- John Bolt, Field Museum
- James Hopson, Organismal Biology and Anatomy
- Wen-Hsiung Li, Ecology and Evolution
- R. Eric Lombard, Organismal Biology and Anatomy
- Thomas Nagylaki, Ecology and Evolution
- Janice B. Spofford, Ecology and Evolution
- · Harold Voris, Field Museum
- William Wimsatt, Philosophy

The Committee on Evolutionary Biology (CEB) provides students with the opportunity for interdisciplinary study of all aspects of evolutionary biology. The committee consists of faculty members with primary appointments in departments in all four graduate divisions within the University and of associated faculty

from institutions in the Chicago area, such as Argonne National Laboratory, the Brookfield Zoo, Lincoln Park Zoo, Chicago Botanic Garden, Morton Arboretum, and the Field Museum. The diversity of research interests represented by the collective expertise of the committee faculty contributes to its strong national and international reputation as a graduate training program.

Students in the committee have ready access to facilities at the associated institutions, including the more than 2,000 animals representing over 400 species at Brookfield Zoo, more than 17 million specimens in the Field Museum collections in botany, zoology, and paleontology, and libraries at the Field Museum and Brookfield Zoo. Various facilities for the study of molecular evolution and phylogenetic analysis are available to committee students, as are several student computer centers, an on-campus greenhouse, and digital equipment for off-site research.

In the Chicago area, committee students have access to the rich resources available at the Chicago Botanic Garden, the Shedd Aquarium, the Morton Arboretum, and the many parks and lands managed by the local county forest preserve and park districts.

The University of Chicago is a member of the Organization for Tropical Studies. Doctoral students in the committee have taken courses in tropical ecology and conducted research in Costa Rica through this affiliation. Recent evolutionary biology students have also conducted domestic research at a variety of field sites, including the Southwest Research Station of the American Museum of Natural History, Sierra Nevada Aquatic Research Laboratory, Kellogg Biological Station, and Friday Harbor Marine Laboratory. International research is conducted on every continent.

#### PROGRAM OF STUDY

Most students in the Committee on Evolutionary Biology complete their Ph.D. program in about five and a half years.

The first and second years consist largely of course work and individual reading and research courses, aiming toward successful defense of a dissertation research proposal by the end of the second year of study.

#### FIRST YEAR

Entering students are expected to have received a broad undergraduate training in biology and a good background in related quantitative subjects, such as chemistry, statistics and calculus. Students who are admitted with gaps in these areas may be required to remedy their deficiencies by taking appropriate courses during their first two years in the graduate program. The committee maintains a student advisory committee, which meets three times a year with each of the first and second year students to advise them on courses available, arbitrate on which courses meet the committee's course distribution requirements, and otherwise help students keep on track towards Ph.D. candidacy.

#### SECOND YEAR

Second year students continue to meet with the student advisory committee until they pass their preliminary examination/dissertation proposal hearing. The first part of the second year may be taken up mostly with course work, supplemented more heavily by reading and research courses.

#### Reading and research requirements

Committee on Evolutionary Biology courses have been divided into six broad areas. Students must successfully complete a course in five of the six areas to be recommended for Ph.D. candidacy. The primary aim is that the student acquires considerable breadth in evolutionary biology; this breadth and the interdisciplinary research it permits should be the distinguishing feature of students working in the committee. In the first two years of study students generally enroll in three courses per quarter. This can be a combination of lecture, seminar, research, and reading formats.

# DIVISION OF THE BIOLOGICAL SCIENCES TEACHING ASSISTANT REQUIREMENT PROGRAM

During their tenure in the doctoral program, students are required to register for two evaluated teaching assistants in two approved courses.

# DISSERTATION PROPOSAL HEARING AND ADMISSION TO PH.D. CANDIDACY

Students should select an advisor no later than Autumn Quarter of their second year. This advisor normally will become the chair of the student's dissertation proposal committee. The committee for the dissertation proposal hearing will be formed by the student and her/his advisor, subject to approval by the CEB Chair, when the student notifies the CEB Chair in writing of her/his plans to take the examination.

CEB students must present and defend their dissertation proposal, followed by an oral examination by a faculty committee on general issues in evolutionary biology. Students are expected to successfully defend their dissertation proposal by the end of the Spring Quarter of their second year in the Ph.D. program. After successfully defending their dissertation proposal, students may be recommended for candidacy for the Ph.D. by the CEB Chair.

#### PH.D. DISSERTATION

Upon successful completion of the dissertation proposal hearing and admission into candidacy for the Ph.D., students work on their dissertation projects in close consultation with their faculty advisor and dissertation committee. During a period of two to three years the student does primary original research, participates in seminars, discussion groups, and professional meetings and conferences, and completes the written Ph.D. dissertation. Students are expected to publish dissertation related research, and encouraged to submit a substantial part of their research for publication before Ph.D. completion. A student is expected to submit a dissertation outline and proposed timetable for dissertation completion six months

before the estimated date of final defense. These plans must be approved by the advisory committee, and a copy submitted as part of the meeting report to the CEB Chair.

The Ph.D. in evolutionary biology is awarded based upon the candidate's having:

- Submitted a written dissertation reporting results of the student's original research in a form suitable for publication, which must be approved by the faculty advisor and dissertation committee.
- Successfully completed a final oral examination covering the student's field of specialization.
- Final approval of the dissertation by the CEB Chair.

#### **ADMISSION**

We strongly advise students considering application to the committee to begin preparation of their application early in the autumn quarter, so that all materials will arrive by the December 1<sup>st</sup> deadline. The committee requires GRE General Test scores from all applicants. Foreign applicants whose first language is not English also must submit TOEFL test scores with their application materials.

Our students have the opportunity to apply for the M.S. degree while completing their work for the Ph.D. The M.S. degree is also awarded in special cases, usually in association with Ph.D. requirements for graduate students in the Committee on the Conceptual and Historical Studies of Science.

Further information also may be obtained from the department's home at http://evbio.uchicago.edu, or by sending an email to darwin@uchicago.edu.

#### **EVOLUTIONARY BIOLOGY COURSES**

#### EVOL 30250. Chordates: Evolution and Comparative Anatomy. 100 Units.

Chordate biology emphasizes the diversity and evolution of modern vertebrate life, drawing on a range of sources (from comparative anatomy and embryology to paleontology, biomechanics, and developmental genetics). Much of the work is lab-based, with ample opportunity to gain firsthand experience of the repeated themes of vertebrate body plans, as well as some of the extraordinary specializations manifest in living forms. The instructors, who are both actively engaged in vertebrate-centered research, take this course beyond the boundaries of standard textbook content.

Instructor(s): M. Coates Terms Offered: Spring

Prerequisite(s): Biological Sciences Fundamentals sequence. Recommended for AP5 students.

Equivalent Course(s): BIOS 22250,ORGB 33750

#### EVOL 30300. Key Issues in Early Vertebrate Evolution. 100 Units.

The course addresses questions about the origin of vertebrates, the interrelationships of major gnathostome clades, and the fish-tetrapod transition.

Instructor(s): M. I. Coates Terms Offered: Winter

Prerequisite(s): Undergraduate level chordate biology required; familiarity with methods in systematic biology advantageous.

Equivalent Course(s): ORGB 31300

#### EVOL 31500. Ecological Genetics. 100 Units.

A graduate class in ecological genetics (evolution of the phenotype, without considering molecular approaches). This will be a weekly 2-hour seminar, emphasizing quantitative genetic approaches. Basic theory will cover such topics as heritability and breeding value, genetic correlation, Price's theorem and sexual selection. Seminars will include discussions of current topics from the literature. Instructor(s): T. Price Terms Offered: Autumn 2014

Equivalent Course(s): ECEV 31500

#### EVOL 31700. Macroevolution. 100 Units.

Patterns and processes of evolution above the species level, in both recent and fossil organism. A survey of the current literature, along with case studies.

Instructor(s): D. Jablonski Terms Offered: Spring

Equivalent Course(s): GEOS 36800

#### EVOL 31800. Taphonomy. 100 Units.

Lecture and research course on patterns and processes of fossilization, including rates and controls of soft tissue decomposition, post mortem behavior of skeletal hard parts, concentration and burial of remains, scales of time averaging, and the net spatial and compositional fidelity of (paleo)biologic information, including trends across environments and evolutionary time. Offered alternate years.

Instructor(s): S. Kidwell

Equivalent Course(s): GEOS 36700

#### EVOL 31900. Topics in Paleobiology. 100 Units.

In this seminar we investigate paleobiological or multidisciplinary topics of current interest to students and faculty. Previous subjects include the origin of phyla, historical and macro-ecology, the stratigraphic record and evolutionary patterns, and climate and evolution.

Instructor(s): D. Jablonski, S. Kidwell, T. Price Terms Offered: Autumn Equivalent Course(s): ECEV 36900, GEOS 36900

#### EVOL 32300. Principles of Paleontology. 100 Units.

The focus of this course is on the nature of the fossil record, the information it provides on patterns and processes of evolution through geologic time, and how it can be used to solve geological and biological problems. Lectures cover the principles of paleontology (e.g., fossilization, classification, morphologic analysis and interpretation, biostratigraphy, paleoecology, macroevolution); labs are systematic, introducing major groups of fossil invertebrates. (L) Instructor(s): M. Foote Terms Offered: not offered 2013-2014 Prerequisite(s): GEOS 13100-13200, or completion of the general education requirement in the biological sciences, or consent of instructor. Equivalent Course(s): GEOS 26400,BIOS 23255,GEOS 36400

#### EVOL 32400. Invertebrate Paleobiology and Evolution. 100 Units.

This course provides a detailed overview of the morphology, paleobiology, evolutionary history, and practical uses of the invertebrate and microfossil groups commonly found in the fossil record. Emphasis is placed on understanding key anatomical and ecological innovations within each group and interactions among groups responsible for producing the observed changes in diversity, dominance, and ecological community structure through evolutionary time. Labs supplement lecture material with specimen-based and practical application sections. An optional field trip offers experience in the collection of specimens and raw paleontological data. Several "Hot Topics" lectures introduce important, exciting, and often controversial aspects of current paleontological research linked to particular invertebrate groups. Instructor(s): M. Webster L. Terms Offered: Autumn

Prerequisite(s): GEOS 13100 and 13200, or equivalent. Students majoring in biological sciences only; Completion of the general education requirement in the biological sciences, or consent of instructor.

Equivalent Course(s): GEOS 26300, BIOS 23261, GEOS 36300

#### **EVOL 32500.** Evolutionary History of Terrestrial Ecosystems. 100 Units.

This seminar course covers the evolution of terrestrial ecosystems from their Paleozoic assembly through to the modern world. The fossil history of plant, vertebrate, invertebrate, and fungal lineages are covered, as well as the diversification of their ecological interactions. The influence of extinction events and important extrinsic factors (e.g., geography, climate, atmospheric composition) also are considered.

Instructor(s): C. K. Boyce Terms Offered: Spring Equivalent Course(s): GEOS 37000,GEOS 27000

#### EVOL 33001. Paleobiological Modeling and Analysis-1. 100 Units.

This course is an introduction to mathematical modeling as applied to problems in paleobiology and evolutionary biology. Topics include: basic probability theory; general approaches to modeling; model comparison using likelihood and other criteria; forward modeling of branching processes; sampling models; and inverse methods. A series of programming exercises and a term project are required. Programming in R or C is recommended, but any language may be used. Winter quarter, generally in even numbered years. GEOS 36501 and GEOS 36502 can be taken in either order.

Instructor(s): M. Foote Terms Offered: Winter

Prerequisite(s): Mathematics through first-year calculus; basic computer programming skills (or willingness to learn); elementary statistics helpful.

Equivalent Course(s): GEOS 36501

#### EVOL 33002. Paleobiological Modeling and Analysis-2. 100 Units.

This course is an introduction to multivariate analysis, with emphasis on morphological data and problems in paleontology and evolutionary biology. Topics include: types of data and scales of measurement; data transformations; bivariate analysis; measurement of similarity and difference; clustering; ordination; singular value decomposition; principal component analysis, factor analysis, principal coordinates, correspondence analysis, and other eigenvector methods; and path analysis. Each student will bring a multivariate dataset (not necessarily original) to the course and will write a series of short papers based on analysis of these data. Code written in the R programming language will be supplied for most analyses. Winter quarter, generally in odd numbered years. GEOS 36501 and GEOS 36502 can be taken in either order.

Instructor(s): M. Foote Terms Offered: Winter

Prerequisite(s): Mathematics at secondary school level; basic computer programming skills (or willingness to learn); calculus, linear algebra, and elementary statistics also helpful, although essential points will be reviewed. Equivalent Course(s): GEOS 36502

#### EVOL 33700. Evolutionary Developmental Biology. 100 Units.

The purpose of this course is to provide a developmental genetic perspective on evolutionary questions that have emerged in various disciplines (e.g., developmental biology, paleontology, phylogenetic systematics). Topics range from the evolution of gene regulation to the origin of novelties (e.g., eyes, wings). Although these subjects are introduced in lectures, the focus of this course is on reading, presenting, and discussing original research papers.

Instructor(s): U. Schmidt-Ott Terms Offered: Spring

Prerequisite(s): Biological Sciences Fundamentals sequence. Recommended for AP5 students.

Equivalent Course(s): BIOS 22256

#### **EVOL 33850. Evolution and Development. 100 Units.**

The course will provide a developmental perspective on animal body plans in phylogenetic context. The course will start with a few lectures, accompanied by reading assignments. Students will be required to present a selected research topic that fits the broader goal of the course and will be asked to submit a referenced written version of it after their oral presentation. Grading will be based on their presentation (oral and written) as well as their contributions to class discussions. Instructor(s): U. Schmidt-Ott Terms Offered: Autumn

Prerequisite(s): Advanded undergraduates may enroll with the consent of the instructor.

Equivalent Course(s): DVBI 33850,BIOS 22306,ORGB 33850

#### **EVOL 34100.** Introduction to Invertebrate Biology. 100 Units.

This is a survey of the diversity, structure, and evolution of the invertebrate phyla, with emphasis on the major living and fossil invertebrate groups. Structure-function relationships and the influence of body plans on the evolutionary history of the invertebrate phyla are stressed.

Instructor(s): M. LaBarbera. L. Terms Offered: Autumn 2013

Prerequisite(s): Completion of the general education requirement in the biological sciences or consent of instructor

Equivalent Course(s): BIOS 22244

#### EVOL 34200. Biological Fluid Mechanics. 100 Units.

Prior physics course required; prior chemistry and calculus courses recommended. This course introduces fluid mechanics and the interactions between biology and the physics of fluid flow (both air and water). Topics range from the fluid mechanics of blood flow to the physics (and biology) of flight in birds and insects.

Instructor(s): M. LaBarbera. L. Terms Offered: Winter

Prerequisite(s): Completion of the general education requirement for the biological sciences

Equivalent Course(s): BIOS 22242, ORGB 34200

#### EVOL 34300. Biomechanics of Organisms. 100 Units.

Prior chemistry, physics, and calculus courses recommended. This course examines how organisms cope with their physical environment, covering the properties of biological materials, mechanical analysis of morphology, and principles of design optimization. We emphasize support systems of organisms but also examine aspects of cardiovascular design. Mechanical properties of biomaterials are analyzed in relation to their underlying biochemical organization and biophysical properties, with mathematical treatment at an introductory level. The lab research project is optional.

Instructor(s): M. LaBarbera. L. Terms Offered: Winter 2013

Prerequisite(s): Completion of the general education requirement in the biological sciences

Equivalent Course(s): BIOS 22243,ORGB 34300

#### **EVOL 34800.** Kinship and Social Systems. 100 Units.

This course will use a biological approach to understanding how groups form and how cooperation and competition modulate group size and reproductive success. We will explore social systems from evolutionary and ecological perspectives, focusing on how the biotic and social environments favor cooperation among kin as well as how these environmental features influence mating systems and inclusive fitness. While a strong background in evolutionary theory is not required, students should have basic understanding of biology and natural selection. Course will use combination of lectures and discussion. (A\*, 1\*)

Instructor(s): J. Mateo Terms Offered: Autumn

Equivalent Course(s): CHDV 34800

#### **EVOL 35300. Phylogenetic Comparative Methods. 100 Units.**

This is a graduate seminar course about the uses of phylogenetic trees in evolution and ecology, emphasizing historical inference of phenotypic traits, geographic ranges, and community ecology. (This is not a course on how to infer phylogenies, or their uses in studies of molecular evolution and population genetics.) Within this scope we will focus on topics of popular interest and relevance to student research. The format of the 2-hour weekly meeting will be somewhat fluid, but I anticipate giving introductory remarks or a lecture on main topics, followed by discussion of primary literature, and opportunities to work hands-on with software (bring your own laptop). Small-group assignments will be given to develop and present short tutorials on conducting analyses of real data.

Instructor(s): R. Ree, A. Hipp

## **EVOL 35401.** Reconstructing the Tree of Life: An Introduction to Phylogenetics. 100 Units.

This course is an introduction to the tree of life (phylogeny): its conceptual origins, methods for discovering its structure, and its importance in evolutionary biology and other areas of science. Topics include history and concepts, sources of data, methods of phylogenetic analysis, and the use of phylogenies to study the tempo and mode of lineage diversification, coevolution, biogeography, conservation, molecular biology, development, and epidemiology. One Saturday field trip and weekly computer labs required in addition to scheduled class time. This course is offered in alternate (odd) years.

Instructor(s): C. Moreau, R. Ree. L. Terms Offered: Autumn

Prerequisite(s): Completion of the general education requirement in the biological sciences or consent of instructor

Equivalent Course(s): BIOS 23404

#### EVOL 35501. Phylogenetics. 100 Units.

This course will explore the principles of molecular systematic biology and the use of contemporary phylogenetic methods to address diverse evolutionary questions. Topics include homology and the alignment of sequence data, genome evolution, computational complexity, tree-searching algorithms, optimality criteria, coalescent methods, tree support, and an introduction to comparative methods. This course will emphasize theoretical issues followed by empirical examples to examine these topics as well as feature hands-on instruction for relevant computer programs and resources.

Terms Offered: Spring

#### EVOL 35600. Principles of Population Genetics-1. 100 Units.

Examines the basic theoretical principles of population genetics, and their application to the study of variation and evolution in natural populations. Topics include selection, mutation, random genetic drift, quantitative genetics, molecular evolution and variation, the evolution of selfish genetic systems, and human evolution.

Instructor(s): R. Hudson Terms Offered: Winter

Equivalent Course(s): ECEV 35600

#### EVOL 36700. Morphometrics. 100 Units.

This graduate-level course serves as an introduction to the field of morphometrics (the analysis of organismal shape). Quantitative exploratory and confirmatory techniques involving both traditional (length-based) and geometric (landmark-based) summaries of organismal shape are introduced in a series of lectures and practical exercises. Emphasis is placed on the application of morphometric methods to issues such as (but not restricted to) quantification of intraspecific variability, interspecific differences, disparity, ontogenetic growth patterns (allometry), and phylogenetic changes in morphology. Relevant statistical and algebraic operations are explained assuming no prior background. Students are required to bring personal laptop computers, and are expected to acquire and analyze their own data sets during the course.

Instructor(s): M. Webster

Equivalent Course(s): GEOS 36000

#### EVOL 36900. Biopsychology of Sex Differences. 100 Units.

This course will explore the biological basis of mammalian sex differences and reproductive behaviors. We will consider a variety of species, including humans. We will address the physiological, hormonal, ecological and social basis of sex differences. To get the most from this course, students should have some background in biology, preferably from taking an introductory course in biology or biological psychology. (A, 1)

Instructor(s): J. Mateo Terms Offered: Autumn

Note(s): Not offered 2013-14

Equivalent Course(s): PSYC 31600, GNSE 30901, CHDV 30901

#### EVOL 37500. Sexual Selection. 100 Units.

A discussion and critical analysis of sexual selection. The course will consist of lectures, reading and discussion.

Instructor(s): S. Pruett-Jones Terms Offered: Winter

Prerequisite(s): Common Core Biology, BIOS 248, or consent of instructor.

Equivalent Course(s): ECEV 37500

#### EVOL 37600. Research Seminar in Animal Behavior I. 100 Units.

Instructor(s): J. Mateo Terms Offered: Autumn

Prerequisite(s): Graduate students only.

Note(s): Students register for this course in Autumn Quarter and receive credit in Spring Quarter after successful completion of the year's work.

Equivalent Course(s): CHDV 37500

#### EVOL 37700. Research Seminar in Animal Behavior II. 100 Units.

Instructor(s): J. Mateo Terms Offered: Winter

Prerequisite(s): Graduate students only. Equivalent Course(s): CHDV 37502

#### EVOL 37800. Research Seminar in Animal Behavior III. 100 Units.

Instructor(s): J. Mateo Terms Offered: Spring

Note(s): Graduate students only. Equivalent Course(s): CHDV 37503

#### EVOL 38100. Evolution of the Hominoidea. 200 Units.

This course is a detailed consideration of the fossil record and the phylogeny of Hominidae and collateral taxa of the Hominidae that is based upon studies of casts and comparative primate osteology.

Instructor(s): R. Tuttle Terms Offered: Winter

Prerequisite(s): Third- or fourth-year standing and consent of instructor

Equivalent Course(s): ANTH 28100, ANTH 38100, HIPS 24000

#### EVOL 38200. Comparative Primate Morphology. 200 Units.

This course covers functional morphology of locomotor, alimentary, and reproductive systems in primates. Dissections are performed on monkeys and apes. Instructor(s): R. Tuttle Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 28300, ANTH 38200, HIPS 23500

# EVOL 38400. Classical Readings in Anthropology: History and Theory of Human Evolution. 100 Units.

This course is a seminar on racial, sexual, and class bias in the classic theoretic writings, autobiographies, and biographies of Darwin, Huxley, Haeckel, Keith, Osborn, Jones, Gregory, Morton, Broom, Black, Dart, Weidenreich, Robinson, Leakey, LeGros-Clark, Schultz, Straus, Hooton, Washburn, Coon, Dobzhansky, Simpson, and Gould.

Instructor(s): R. Tuttle Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 21102, ANTH 38400, HIPS 23600

#### EVOL 38800. Introduction to Research at the Field Museum. 100 Units.

Introduction to Research at the Field Museum and the University of Chicago. This course meets once every two weeks for a lecture by a curator at the Field Museum. A different curator lectures each week, presenting results of her/his current research on a range of topics in evolutionary biology, including phylogenetic systematics, molecular biology, paleontology, development, conservation biology and biodiversity, population biology, or biomechanics. Lectures often are followed by a tour of one of the major natural history collections in the world of living or fossil birds, mammals, plants, insects, fishes, invertebrates, or amphibians and reptiles.

Instructor(s): S. Hackett Terms Offered: Autumn

#### EVOL 40000. Evolutionary Conservation Biology. 100 Units.

Graduate proseminar examining critical questions and issues in evolutionary conservation biology, from paleobiology of extinction and survivals to contemporary issues of hotspots, population genetics and ecology, behavioral ecology of free and managed populations, and molecular evolution and systematic biology. Instructor(s): Staff

#### EVOL 40100. Grants, Publications and Professional Issues, 100 Units.

Covers professional topics in evolutionary biology, primarily strategies in grant writing and review. Each student will work towards the submission of an application of their choice. The course meets weekly and involves extensive writing and discussion.

Instructor(s): J. Bergelson, R. Ho, M. Coates Terms Offered: Autumn Note(s): Only open to first year graduate students in the Darwinian Sciences Cluster Equivalent Course(s): ORGB 40100, ECEV 40100

#### EVOL 41500. Topics in Stratigraphy and Biosedimentology. 100 Units.

Seminar course using the primary literature and/or a field problem. Topic selected from the rapidly evolving fields of sequence stratigraphy, basin analysis, and animal sediment relationships.

Instructor(s): S. Kidwell

Prerequisite(s): GEOS 26400 and GEOS 28300 or equivalent

Equivalent Course(s): GEOS 38400

#### EVOL 42600. Community Ecology. 100 Units.

Lectures and readings cover advanced topics in multi-species systems, and include an introduction to basic theoretical approaches.

Instructor(s): J.T. Wootton Terms Offered: Autumn

Equivalent Course(s): ECEV 42600

#### **EVOL 42800. Population Ecology. 100 Units.**

A lecture course on the empirical and theoretical approaches to the study of natural populations, including field methodologies and quantitative approaches. Includes computer assignments.

Instructor(s): C. Pfister Terms Offered: Winter

Equivalent Course(s): ECEV 42800

#### EVOL 42900. Theoretical Ecology. 100 Units.

An introduction to mathematical modeling in ecology. The course will begin with linear growth and Lotka-Volterra models, and proceed to partial differential equations. The course's perspective will emphasize numerical computations and fitting models to data.

Instructor(s): G. Dwyer, S. Cobey Terms Offered: Winter

Equivalent Course(s): ECEV 42900

#### EVOL 44001. Molecular Evolution I: Fundamentals and Principles. 100 Units.

The comparative analysis of DNA sequence variation has become an important tool in molecular biology, genetics, and evolutionary biology. This course covers major theories that form the foundation for understanding evolutionary forces that govern molecular variation, divergence, and genome organization. Particular attention is given to selectively neutral models of variation and evolution, and to alternative models of natural selection. The course provides practical information on accessing genome databases, searching for homologous sequences, aligning DNA and protein sequences, calculating sequence divergence, producing sequence phylogenies, and estimating evolutionary parameters.

Instructor(s): M. Kreitman L. Terms Offered: Winter

Prerequisite(s): Two quarters of biology and calculus, or consent of instructor

Equivalent Course(s): BIOS 23258, ECEV 44001

#### EVOL 45500. Biogeography. 100 Units.

This course examines factors governing the distribution and abundance of animals and plants. Topics include patterns and processes in historical biogeography, island biogeography, geographical ecology, areography, and conservation biology (e.g., design and effectiveness of nature reserves).

Instructor(s): B. Patterson (odd years, lab). L., Heaney (even years, discussion) Terms Offered: Winter

Prerequisite(s): Completion of the general education requirement in the biological sciences and a course in either ecology, evolution, or earth history; or consent of instructor

Equivalent Course(s): BIOS 23406, ENST 25500, GEOG 25500, GEOG 35500

#### EVOL 46200. Evolution and the Fossil Record. 100 Units.

This course serves as an introduction to the practical and theoretical issues involved in obtaining primary systematic data from the fossil record, and demonstrates the criticality of such data to the rigorous documentation and interpretation of evolutionary patterns. Precise topics of the seminar discussions will vary from year to year depending on relevance to student research projects and interest, but are likely to focus on issues such as (but not restricted to) practical techniques in specimen-based paleontology (including fossil preparation and photography), species delimitation (including species concepts, variability, and ecophenotypy), stratigraphic/geographic range determination (including biostratigraphic correlation), phylogeny reconstruction (including the relevance of stratigraphic data), and the importance of these topics to broader macroevolutionary issues such as diversity/disparity dynamics and the determination of evolutionary trends, rates and processes.

Instructor(s): M. Webster

Equivalent Course(s): GEOS 36200

#### EVOL 49400. Approaches to Teaching in the Biological Sciences. 100 Units.

This course will introduce different teaching philosophies and methods that address how to be an effective teacher in the biological sciences. Specifically, the course will address what skills and knowledge undergraduates need to acquire and which assignments best teach these skills. Students will prepare course syllabi, discuss different approaches to teaching, and draft a philosophy of teaching statement. The overall goal for the course is that the students think critically about the art of teaching and formulate their own thoughts on the matter to better prepare them for their own careers in teaching.

Instructor(s): Staff

#### EVOL 49500. Teaching in Evolutionary Biology. 100 Units.

Under the supervision of University faculty, graduate students in the Evolutionary Biology may serve as teaching assistants for courses in the College and relevant Graduate Divisions. Students will be evaluated and mentored throughout the quarter by their faculty supervisor, and at the end of the quarter by enrolled students. Prerequisite: successful fulfillment of the BSD teaching requirement and consent of instructor. Students must choose the instructor name from the faculty listing in the *Time Schedules* and register using that instructor's assigned section number.

Instructor(s): Staff

# EVOL 49600. Graduate Readings in Evolutionary Biology at the Field Museum. VAR Units.

Directed individual reading courses supervised by CEB faculty members who are curators at the Field Museum. Students must choose the instructor name from the faculty listing in the *Time Schedules* and register using that instructor's assigned section number.

Instructor(s): Staff

Prerequisite(s): Consent of instructor.

#### EVOL 49700. Graduate Readings in Evolutionary Biology. VAR Units.

Directed individual reading courses in evolutionary biology supervised by CEB faculty members. Prerequisite: consent of instructor. Students must choose the instructor name from the faculty listing in the *Time Schedules* and register using that instructor's assigned section number.

Instructor(s): Staff.

Prerequisite(s): Consent of Instructor

#### EVOL 49800. Graduate Research - Off Campus. VAR Units.

Advanced research under the direction of the faculty of the Committee on Evolutionary Biology, undertaken away from the University of Chicago campus at the Field Museum, the Chicago Zoological Park, Lincoln Park Zoo, established biological field stations under the direction of their staffs, or other locations approved by the Chair and the student's advisory committee. Students must choose the instructor name from the faculty listing in the *Time Schedules* and register using that instructor's assigned section number.

Instructor(s): Staff

Prerequisite(s): Consent of Instructor

#### EVOL 49900. Graduate Research - On Campus. VAR Units.

Advanced research under the direction of the faculty of the Committee on Evolutionary Biology. While any approved research problem may be pursued under this course number, special attention is called to the following research fields available in the Committee: population ecology and genetics, entomology, applied ecology, plant biology, systematics of fossil invertebrates, molluscs, problems in the systematics of arthropods, herpetology, mammalogy, ornithology, and ichthyology, theoretical biology, animal behavior, paleoecology, molecular evolution, functional morphology, evolution of development, community ecology and evolution, evolutionary paleobiology and macroevolution, and physiological ecology. Students must choose the instructor name from the faculty listing in the *Time Schedules* and register using that instructor's assigned section number.

Instructor(s): Staff

Prerequisite(s): Consent of Instructor



# COMMITTEE ON GENETICS, GENOMICS & SYSTEMS BIOLOGY

#### Chair

• Richard R. Hudson

#### Professors

- · Graeme Bell, Biochemistry & Molecular Biology
- Joy Bergelson, Ecology & Evolution
- Douglas K. Bishop, Radiation & Cellular Oncology
- · Nancy Jean Cox, Medicine
- Jerry Coyne, Ecology & Evolution
- · Anna DiRienzo, Human Genetics
- M. Eileen Dolan, Medicine
- Wei Du, Ben May Department for Cancer Research
- Martin Feder, Organismal Biology & Anatomy
- Richard Fehon, Molecular Genetics & Cell Biology
- Edwin L. Ferguson, Molecular Genetics & Cell Biology
- T. Conrad Gilliam, Human Genetics
- Benjamin Glick, Molecular Genetics & Cell Biology
- Michael Glotzer, Molecular Genetics & Cell Biology
- Jean Greenberg, Molecular Genetics & Cell Biology
- Robert Grossman, Medicine
- Robert Ho, Organismal Biology & Anatomy
- · Richard R. Hudson, Ecology & Evolution
- Martin Kreitman, Ecology & Evolution
- Stephen J. Kron, Molecular Genetics & Cell Biology
- Bruce T. Lahn, Human Genetics
- · Michelle M. LeBeau, Medicine
- Manyuan Long, Ecology & Evolution
- Rima McLeod, Ophthalmology & Visual Science
- Elizabeth M. McNally, Medicine
- · Mary Sara McPeek, Statistics
- Carole Ober, Human Genetics
- Olufunmilayo Olopade, Medicine
- · Brian J. Popko, Neurology
- Trevor Price, Ecology & Evolution
- · Victoria Prince, Organismal Biology & Anatomy
- Jonathan Pritchard, Human Genetics

- Molly Przeworski, Human Genetics
- Ilaria Rebay, Ben May Department for Cancer Research
- · John Reinitz, Ecology & Evolution
- Carrie Rinker-Schaeffer, Surgery
- Bernard Roizman, Molecular Genetics & Cell Biology
- Marsha Rosner, Ben May Department for Cancer Research
- Lucia Rothman-Denes, Molecular Genetics & Cell Biology
- · Janet D. Rowley, Medicine
- · Andrey Rzhetsky, Medicine
- James A. Shapiro, Biochemistry & Molecular Biology
- Ursula B. Storb, Molecular Genetics & Cell Biology
- Joseph W. Thornton, Ecology & Evolution
- Kevin White, Human Genetics
- Chung-I Wu, Ecology & Evolution Associate Professors
- Sean Crosson, Biochemistry & Molecular Biology
- Yoav Gilad, Human Genetics
- Tong-Chuan He, Surgery
- Robert Ho, Organismal Biology & Anatomy
- Akira Imamoto, Ben May Department for Cancer Research
- David Kovar, Molecular Genetics & Cell Biology
- Gayle K. Lamppa, Molecular Genetics & Cell Biology
- Jocelyn Malamy, Molecular Genetics & Cell Biology
- Laurens J. Mets, Molecular Genetics & Cell Biology
- Ivan Moskowitz, Pediatrics
- Marcelo Nobrega, Human Genetics
- Kenan Onel, Pediatrics
- Abraham Palmer, Human Genetics
- · Ilya Ruvinsky, Ecology & Evolution
- Urs Schmidt-Ott, Organismal Biology & Anatomy
- Jonathan P. Staley, Molecular Genetics & Cell Biology
- Aaron Turkewitz, Molecular Genetics & Cell Biology Assistant Professors
- David Biron, Physics
- Mohan Gupta, Molecular Genetics & Cell Biology
- Sally Horne-Badovinac, Molecular Genetics & Cell Biology
- Richard Jones, Ben May Department for Cancer Research
- Jack Gilbert, Ecology & Evolution
- Vincent Lynch, Human Genetics

- Edwin Munro, Molecular Genetics & Cell Biology
- Alex Ruthenburg, Molecular Genetics & Cell Biology
- · Andrew Skol, Medicine
- Barbara Stranger, Medicine Emeritus Faculty
- Wolfgang Epstein, Molecular Genetics & Cell Biology
- Robert Haselkorn, Molecular Genetics & Cell Biology
- · Samuel Refetoff, Medicine
- Angelo Scanu, Medicine
- Janice B. Spofford, Ecology & Evolution
- Bernard Strauss, Molecular Genetics & Cell Biology

Genetics, Genomics & Committee on Systems cg.uchospitals.edu) (GGSB) is an interdisciplinary degree-granting program that brings together biologists from over a dozen academic departments. The program is aimed at training Ph.D. scholars for careers as independent scientists in basic and applied biomedical research and education. The graduate program in Genetics, Genomics, & Systems Biology offers a program of basic study leading to Doctor of Philosophy in Genetics. The Ph.D. training program combines a foundation in modern genetic analysis with training in current methods for formulating and addressing biological questions in the context of complex systems. Such systems are studied in physiological, developmental and evolutionary contexts. The presence of both basic and clinical sciences in the Division of Biological Sciences (BSD) enhances the Committee's broad based interdisciplinary approach to teaching and research. The Committee provides an exciting environment in which to pursue rigorous, high quality training with flexibility in designing programs to meet individual needs. The focus of GGSB is to train students to utilize sophisticated genetic analysis, genomics, modeling and systems level analysis of regulations networks in their own research program. Opportunities are available to study diverse areas of biology and genetics, including bioinformatics, developmental processes, gene structure and regulation, genetic recombination and mutation, chromosome mechanics, evolution, human disease, immunology, and other areas of modern genetics. Students receive broad training in these sub-disciplines, while specializing in one of them for their research career. The Committee's goal is to provide an intellectually stimulating, collegial and supportive environment for students to progress smoothly from research training to research independence.

#### CURRRICULUM AND TIMELINE - FIRST YEAR

The first year of graduate study is spent completing coursework, exploring research opportunities and doing laboratory rotations

<u>Core Courses and Electives</u> (http://cg.uchospitals.edu/ Graduate\_Program/02\_Curriculum\_and\_Timeline\_First\_Year.php)

Graduate students in the BSD are required to take nine credits of coursework for the Ph.D. program. Each class is one credit.

- 4 required courses in Genetics
- 4 electives
- 2 graded lab rotations for 1/2 credit each

In addition to the course requirements, students attend the Faculty Research Seminar Series (also referred to as "AllStars"), to acquaint themselves with the research community and potential mentors. All first year students in the BSD are required to attend a scientific ethics course.

#### REQUIRED COURSES

- · Genetic Analysis of Model Organisms PLUS
- Genomics & Systems Biology PLUS one of the following three courses:
- Fundamentals of Molecular Biology OR Molecular Biology I OR Molecular Biology II

Students must then choose one of the following to satisfy their final course requirement:

- Fundamentals of Molecular Evolution OR
- Principals of Population Genetics I OR
- Evolutionary Genomics OR
- Human Variation and Disease

The remaining four courses are chosen as elective courses from a host of courses offered in the BSD, the Department of Statistics and the Department of Computer Science. All elective courses are to be approved by an academic advisor. The curriculum and research training are designed to take full advantage of the strength of genetics, genomics & systems biology research at the university. The program sponsors a regular colloquium, an annual symposium on a chosen topic, a biweekly journal club, and a biweekly genetics of model organisms club.

Students undertake short research projects in at least two different laboratories before beginning their dissertation research. The purpose of the rotation is to expose the student to different research environments, broaden his/her acquaintance with useful laboratory techniques, and introduce him/her to the conceptual framework of experimental design. The distribution of course offerings makes it difficult for students to undertake rotations in Autumn Quarter of the first academic year. Therefore, rotations are performed in the winter or spring and summer quarters. The winter and spring rotations last 10 weeks to coincide with the academic quarter. The summer rotation lasts 5 weeks, when the student is able to devote full-time to research. Students wishing to do a third rotation may do so during the second half of Summer Quarter.

#### APPLICATION

For information about applying to our graduate program, please visit our website at http://cg.uchospitals.edu/index.php

#### **GENETICS COURSES**

#### GENE 31900. Introduction to Research. 100 Units.

Lectures on current research by departmental faculty and other invited speakers. A required course for all first-year graduate students

Instructor(s): Staff Terms Offered: Autumn, Winter

Equivalent Course(s): MGCB 31900, BCMB 31900, DVBI 31900, HGEN 31900

#### GENE 39900. Readings Genetics. 100 Units.

A course designed by a student and faculty member. All reading courses must be approved by the Curriculum/Student Affairs Committee prior to registration. Terms Offered: Autumn, Winter, Spring, Summer

GENE 40100. Thesis Reearch: Genetics. 300 Units.

Instructor(s): Hudson Terms Offered: Autumn, Winter, Spring, Summer

GENE 40200. Non-Thesis Research: Genetics. 300 Units.

Instructor(s): Hudson Terms Offered: Autumn, Winter, Spring, Summer

GENE 40206. Genetics: Lab Rotation 3. 150 Units. Terms Offered: Autumn, Winter, Spring, Summer



## DEPARTMENT OF HEALTH STUDIES

#### Chair

- Diane S. Lauderdale, Interim Chair Professors
- Habib Ahsan
- Robert D. Gibbons
- Benjamin B. Lahey
- Diane S. Lauderdale
- Ronald A. Thisted Associate Professors
- · Kathleen A. Cagney, Sociology
- Brian Chiu
- James J. Dignam
- R. Tamara Konetzka Assistant Professors
- · Hongyuan Cao
- Lin Chen
- Rena Conti, Pediatrics
- Michael David, Medicine
- Dezheng Huo
- Brandon Pierce
- John Schneider, Medicine
- Fabrice Smieliauskas Emeritus Faculty
- John Christian Bailar
- Willard G. Manning, Jr.

The Department of Health Studies was approved by the University in 1993 and began operations in November of 1995. The mission of the department is to increase and communicate knowledge to enhance health, reduce illness, and improve outcomes of health care. Department members conduct research in biostatistics, epidemiology, and health services. These projects include interdisciplinary investigations such as medical outcomes studies, development and implementation of guidelines, analysis of clinical decision making, investigation of patient provider relationships, and development of health system models that effectively and efficiently address the health needs of a population.

## PROGRAM OF STUDY

Currently, the Department of Health Studies offers a graduate program, the Master of Science in Health Studies for Clinical Professionals, and a Ph.D. program.

Current information on graduate programs is available from the department's website at http://health.bsd.uchicago.edu/.

#### THE DEGREE OF DOCTOR OF PHILOSOPHY

The Department of Health Studies at the University of Chicago offers a program of study leading to the Ph.D. with emphasis in biostatistics, epidemiology or health services research. This program will prepare individuals for research careers in population-based research in human health and biomedical science. The program is organized around a common quantitative core curriculum designed to prepare students methodologically for more in-depth study in their chosen field and for dissertation research. Beyond the core curriculum, each student will choose a major disciplinary area of concentration, take a sequence of advanced courses in that area, and prepare a dissertation of independent, original, and rigorous research. Opportunities for such concentrated study will be available in the three broad areas of biostatistics, epidemiology and health services research, areas of expertise represented by department faculty.

In addition to the concentration, each student will choose a minor program of study in another area either represented by department faculty or offered elsewhere in the Biological Sciences Division or on campus. Tailored to each individual student, the minor will vary in its degree of specificity from student to student. It may be in one of the broad areas represented by the department, or in a more specialized area. Examples of specialized minors include psychiatric or cancer epidemiology, health economics, economics of aging, clinical trials design, cancer biology, genetic or molecular epidemiology, bioinformatics, or medical decision theory.

## Program requirements

Students should expect to complete the program in 5 years by fulfilling the following requirements:

Complete 18 graduate level courses, including:

- A core curriculum of up to six courses.
- A *major concentration program* approved by the faculty consisting of at least 7 additional courses in a disciplinary domain (such as biostatistics).
- A *minor program* approved by the faculty consisting of at least 3 additional courses in a second disciplinary area.

Successfully complete a course in scientific integrity and the ethical conduct of research, usually in the first year of study (divisional ethics requirement).

Pass a multi-part *preliminary examination* demonstrating mastery of the core curriculum and of foundational knowledge in the chosen area of concentration.

Teach two quarters for credit in pre-approved teaching assistant positions in the biological sciences (divisional teaching requirement).

Establish a doctoral dissertation committee, present proposed dissertation research to members of that committee and other interested faculty, and obtain written approval from the committee on the proposed dissertation research.

Prepare and defend a doctoral dissertation of independent, original, and rigorous research in the chosen area of concentration.

Participate in the departmental seminar, in weekly faculty/student workshops, and in research workshops that overlap with the chosen area of concentration.

## REQUIRED COURSES

HSTD 30900	Principles of Epidemiology	100
HSTD 32400	Applied Regression Analysis	100
HSTD 31001	Epidemiologic Methods	100
HSTD 32700	Biostatistical Methods	100
HSTD 35100	Health Services Research Methods	100
HSTD 35411	The U. S. Health Care System	100
OP		

#### OR

#### APPLICATION FOR ADMISSION

Applications should be received by December 1st for entrance into the program in the fall quarter and should consist of a BSD application (including three letters of recommendation), uploaded official transcript(s) from all degree institutions, GRE scores, TOEFL scores (if applicable), CV/detailed relevant work history, and a research statement indicating area of major concentration.

Interested students should visit the department website at http://health.bsd.uchicago.edu.

# MASTER OF SCIENCE IN HEALTH STUDIES FOR CLINICAL PROFESSIONALS

The Master of Science Program for Clinical Professionals is a course of study in the theory, methods, and concepts of biostatistics, epidemiology, and health services research needed to design and carry out clinical and epidemiologic research programs. It is designed for the professional enhancement of physicians and other clinical professionals. The program can be completed in one year of full time study, or it can be undertaken in conjunction with a clinical fellowship or training program, in which case the course work may be distributed over two or three years. Students in the program acquire skills with basic statistical methods, followed by additional training in the fundamental theory and methods of epidemiology, biostatistics, and health services research. Through choice from a broad range of elective courses, students can specialize in one of the three disciplinary areas.

## ENTRANCE REQUIREMENTS

Applicants should either have a doctoral level clinical degree (such as M.D., D.O., or nursing Ph.D.) from an accredited institution, or must have completed preclinical training at an accredited medical school. In the latter case, the candidate must provide a plan for completion of both the M.D. and S.M. degrees, and a letter of support from the candidate's medical school.

### PROGRAM REQUIREMENTS

A candidate in this program for the degree of Master of Science in Health Studies must satisfy the divisional requirements for the degree, complete the required courses and elective courses (nine courses in total), and complete a master's paper.

## REQUIRED COURSES

HSTD 30700	Clinical Epidemiology	100		
OR				
HSTD 30900	Principles of Epidemiology	100		
HSTD 32100	Introduction to Biostatistics *	100		
HSTD 32400	Applied Regression Analysis	100		
HSTD 31001	Epidemiologic Methods	100		
HSTD 35100	Health Services Research Methods	100		
At least one of the following:				
HSTD 32600	Analysis of Categorical Data	100		
HSTD 32700	Biostatistical Methods	100		
HSTD 33300	Applied Longitudinal Data Analysis	100		
HSTD 33100	Applied Survival Analysis	100		

<sup>\*</sup> STAT 22000 or equivalent can be substituted for this course.

#### APPLICATION FOR ADMISSION

Applications for admission should be completed by December 1st for entry into the program in the following summer quarter.

If the degree program will be pursued while the candidate will be participating in a clinical training program, a letter of support from the training program director is required. Candidates must also submit a statement describing how the proposed course of study will enhance their professional objectives. In addition, candidates must provide transcripts from all post secondary institutions, MCAT or GRE scores, and a completed Biological Sciences Division application.

Interested students should visit the department website at http://health.bsd.uchicago.edu.

#### **HEALTH STUDIES COURSES**

#### HSTD 30030. Introduction to Global Health. 100 Units.

This course provides an overview of global health from the historical perspective to the current state of global health. The course features weekly guest lecturers with a broad range of expertise in the field: topics include the social and economic determinants of health, the economics of global health, global burden of disease, and globalization of health risks, as well as the importance of ethics, human rights, and diplomacy in promoting a healthier world. The course is designed for graduatelevel students and senior undergraduates with an interest in global health work in resource-limited settings.

Instructor(s): J. Schneider, C. S. Olopade Terms Offered: Winter 2014 Prerequisite(s): This course does not meet requirements for the biological sciences major

Equivalent Course(s): BIOS 29294,CCTS 43000

#### HSTD 30700. Clinical Epidemiology. 100 Units.

Clinical epidemiology is the "application of epidemiologic principles and methods to problems encountered in clinical medicine." This course introduces the basic principles of epidemiologic study design, analysis and interpretation, with a particular focus on clinical applications. The course includes lectures and discussions based on critical appraisal of significant research articles. The course is primarily intended for, but not restricted to, students with prior clinical training. Health Studies 30700 and 30900 may not both be taken for credit, either will fulfill the basic epidemiology requirement for the MSCP in Health Studies and either will serve as the epidemiology prerequisite for Health Studies 31001.

Instructor(s): B. Chiu, B. Pierce Terms Offered: Summer

Prerequisite(s): Introductory statistics recommended, may be taken concurrently. Equivalent Course(s): CCTS 45100

#### HSTD 30900. Principles of Epidemiology. 100 Units.

This course does not meet requirements for the biological sciences major. Epidemiology is the study of the distribution and determinants of health and disease in human populations. This course introduces the basic principles of epidemiologic study design, analysis, and interpretation through lectures, assignments, and critical appraisal of both classic and contemporary research articles.

Instructor(s): B. Lahey Terms Offered: Autumn

Prerequisite(s): Introductory statistics recommended or Consent of Instructor Equivalent Course(s): BIOS 29318,ENST 27400,PPHA 36400,STAT 35000

#### HSTD 31001. Epidemiologic Methods. 100 Units.

This course expands on the material presented in "Principles of Epidemiology," further exploring issues in the conduct of epidemiologic studies. The student will learn the application of both stratified and multivariate methods to the analysis of epidemiologic data. The final project will be to write the "specific aims" and "methods" sections of a research proposal on a topic of the student's choice. Instructor(s): D. Lauderdale, R. Thisted Terms Offered: Winter

Prerequisite(s): HSTD 30700 or HSTD 30900 AND HSTD 32400 or applied statistics courses through multivariate regression.

Equivalent Course(s): STAT 35700

#### HSTD 31200. Cancer Epidemiology. 100 Units.

The purpose of this course is to review the basic concepts and issues relevant to cancer epidemiology. Specifically, this course will focus on interpreting cancer statistics, and describing the current state of knowledge regarding the etiology and risk factors for the major cancer sites. In addition, issues in research design and interpretation within the context of cancer epidemiology, as well as the molecular and cellular basis of carcinogenesis as it pertains to cancer occurrence in populations will be discussed. The course is appropriate for students who have an introductory knowledge of epidemiology. Previous study of cancer biology is helpful but not required.

Instructor(s): B. Chiu Terms Offered: Winter Prerequisite(s): HSTD 30700 or HSTD 30900

Note(s): Not offered in 2013-14

#### HSTD 31300. Infectious Disease Epidemiology, Networks and Modeling. 100 Units.

This intermediate-level epidemiology course directed by two infectious disease epidemiologist-physicians will provide an up to date perspective on forgotten, contemporary and emerging infections. The course lectures and readings will provide a rigorous examination of the interactions among pathogens, hosts and the environment that produce disease in diverse populations. In addition to the demographic characteristics and the behaviors of individuals that are associated with a high risk of infection, we will examine complex aspects of the environment as they pertain to disease transmission. These include poverty, globalization, social networks, public health, and racial and ethnic disparities. Methodologic approaches to infectious disease epidemiology that will be covered include traditional study designs, molecular epidemiology, social network analysis, modeling, and network science. Local and global approaches will be applied to case studies from the United States, Asia and Africa.

Instructor(s): M. David, J. Schneider Terms Offered: Spring

Prerequisite(s): HSTD 30700 or HSTD 30900 or introductory epidemiology or consent of instructor.

Note(s): Not offered in 2013-14 Equivalent Course(s): CCTS 43200

#### HSTD 31400. Social Epidemiology. 100 Units.

This course will examine research that has sought to understand how social factors influence health. We will survey and evaluate different types of measurements used in social epidemiology (such as measurements of socioeconomic status, race, ethnicity, stress, social support and neighborhood characteristics), types of study designs, and debates and theories in the literature. A prior course in epidemiology or closely related filed (such as demography or medical sociology) is highly desirable. Familiarity with the statistical methods used in the literature we will be reading, in particular multivariate regression analysis, is necessary.

Instructor(s): D. Lauderdale

Prerequisite(s): A course in epidemiology, demography, medical sociology or the equivalent, and familiarity with multivariate statistical methods.

#### HSTD 31510. Critical Readings in Epidemiology. 100 Units.

Course consists of reading and critiquing important and innovative recent papers in epidemiology. Each week, there will be a different substantive or disease focus for the papers. Research areas covered will be primarily, but not exclusively, in noninfectious diseases. Different faculty will lead the discussion each week and students will prepare and present summary critiques of the articles.

Instructor(s): B. Pierce Terms Offered: Spring Prerequisite(s): HSTD 30700 or HSTD 30900

Note(s): Not offered in 2013-14

#### HSTD 31831. Genetic & Molecular Epidemiology. 100 Units.

This course is designed for students with strong research interests related to identifying and characterizing the role of genetic and molecular features in human disease. Students will be introduced to the key concepts and methodological issues encountered in epidemiological studies that utilize genetic and molecular data. This course will train students on the theoretical and practical aspects of study design and data generation, and also provide the relevant hands-on training for quality control, management, and analysis of large-scale genomic/molecular data. Students are expected to have taken prior coursework in epidemiology, biostatistics, and genetics.

Instructor(s): B. Pierce Terms Offered: Spring

Prerequisite(s): HSTD 30700 or HSTD 30900 (or introductory epidemiology) AND HGEN 47000 or consent of instructor.

#### HSTD 32100. Introduction to Biostatistics. 100 Units.

This course will provide an introduction to the basic concepts of statistics as applied to the bio-medical and public health sciences. Emphasis is on the use and interpretation of statistical tools for data analysis. Topics include (i) descriptive statistics; (ii) probability and sampling; (iii) the methods of statistical inference; and (iv) an introduction to linear and logistics regression.

Instructor(s): J. Dignam Terms Offered: Summer

Prerequisite(s): 2 quarters of pre-calculus

Note(s): \*In addition to the course, there is a statistical computing workshop.

Equivalent Course(s): CCTS 45000

#### HSTD 32400. Applied Regression Analysis. 100 Units.

This course introduces the methods and applications of fitting and interpreting multiple regression models. The primary emphasis is on the method of least squares and its many varieties. Topics include the examination of residuals, the transformation of data, strategies and criteria for the selection of a regression equation, the use of dummy variables, tests of fit, nonlinear models, biases due to excluded variables and measurement error, and the use and interpretation of computer package regression programs. The techniques discussed are illustrated by many real examples involving data from both the natural and social sciences. Matrix notation is introduced as needed.

Terms Offered: Autumn

Prerequisite(s): STAT 22000 or 23400 or 24500 or HSTD 32100

Equivalent Course(s): STAT 22400

#### HSTD 32600. Analysis of Categorical Data. 100 Units.

This course covers statistical methods for the analysis of structured, counted data. Topics may include Poisson, multinomial, and product-multinomial sampling models; chi-square and likelihood ratio tests; log-linear models for cross-classified counted data, including models for data with ordinal categories and log-multiplicative models; logistic regression and logit linear models; and measures of association. Applications in the social and biological sciences are considered, and the interpretation of models and fits, rather than mathematical details of computational procedures, is emphasized.

Terms Offered: Winter

Prerequisite(s): STAT 22000 or 23400 or 24500

Equivalent Course(s): STAT 22600

#### HSTD 32700. Biostatistical Methods. 100 Units.

This course is designed to provide students with tools for analyzing categorical, count, and time-to-event data frequently encountered in medicine, public health, and related biological and social sciences. This course emphasizes application of the methodology rather than statistical theory (e.g., recognition of the appropriate methods; interpretation and presentation of results). Methods covered include contingency table analysis, Kaplan-Meier survival analysis, Cox proportional-hazards survival analysis, logistic regression, and Poisson regression.

Instructor(s): H. Cao Terms Offered: Winter

Prerequisite(s): HSTD 32400, STAT 22400 or STAT 24500 or equivalent or consent of

instructor.

Equivalent Course(s): STAT 22700

#### HSTD 32901. Introduction to Clinical Trials. 100 Units.

This course will review major components of clinical trial conduct, including the formulation of clinical hypotheses and study endpoints, trial design, development of the research protocol, trial progress monitoring, analysis, and the summary and reporting of results. Other aspects of clinical trials to be discussed include ethical and regulatory issues in human subjects research, data quality control, meta-analytic overviews and consensus in treatment strategy resulting from clinical trials, and the broader impact of clinical trials on public health.

Instructor(s): J. Dignam Terms Offered: Spring

Prerequisite(s): HSTD 32100 or STAT 22000; Introductory Statistics or Consent of Instructor

Equivalent Course(s): STAT 35201

#### HSTD 33100. Applied Survival Analysis. 100 Units.

This course will provide an introduction to the principles and methods for the analysis of time-to-event data. This type of data occurs extensively in both observational and experimental biomedical and public health studies, as well as in industrial applications. While some theoretical statistical detail is given (at the level appropriate for a Master's student in statistics), the primary focus will be on data analysis. Problems will be motivated from an epidemiologic and clinical perspective, concentrating on the analysis of cohort data and time-to-event data from controlled clinical trials.

Instructor(s): H. Cao Terms Offered: Autumn

Prerequisite(s): HSTD 32100 or Stat 22000; introductory statistics or consent of instructor

Equivalent Course(s): STAT 35600

#### HSTD 33300. Applied Longitudinal Data Analysis. 100 Units.

Longitudinal data consist of multiple measures over time on a sample of individuals. This type of data occurs extensively in both observational and experimental biomedical and public health studies, as well as in studies in sociology and applied economics. This course will provide an introduction to the principles and methods for the analysis of longitudinal data. Whereas some supporting statistical theory will be given, emphasis will be on data analysis and interpretation of models for longitudinal data. Problems will be motivated by applications in epidemiology, clinical medicine, health services research, and disease natural history studies.

Instructor(s): R. Thisted Terms Offered: Autumn

Prerequisite(s): HSTD 32400/STAT 22400 or equivalent, and HSTD 32600/STAT 22600 or HSTD 32700/STAT 22700 or equivalent; or consent of instructor.

Equivalent Course(s): STAT 36900

#### HSTD 33500. Statistical Applications. 100 Units.

This course provides a transition between statistical theory and practice. The course will cover statistical applications in medicine, mental health, environmental science, analytical chemistry, and public policy.

Lectures are oriented around specific examples from a variety of content areas. Opportunities for the class to work on interesting applied problems presented by U of C faculty will be provided. Although an overview

of relevant statistical theory will be presented, emphasis is on the development of statistical solutions to interesting applied problems.

Instructor(s): R. Gibbons Terms Offered: Spring

Prerequisite(s): HSTD 32700/STAT 22700 or STAT 34700 or consent of instructor.

Equivalent Course(s): STAT 35800

# HSTD 35000. Fundamentals of Health Services Research: Theory, Methods, and Applications. 100 Units.

This course is designed to provide an introduction to the fundamentals of health services research. The basic concepts of health services research will be taught with emphasis on both their social scientific foundations and the methods needed for their practical application to empirically relevant research. Theoretical foundations will draw on principles from economics, sociology, psychology, and the other social sciences. Methodological topics to be covered will include techniques for data collection and analysis, including outcomes measurement, survey methods, large data set research, population-based study design, community based participatory research, research based in clinical settings, qualitative methods, cost-effectiveness analysis, and tools of economic and sociological analysis. The theoretical and empirical techniques taught will emphasize those relevant to the examination of health care costs, quality, and access. Major applications will include: measurement and improvement of health care quality, analysis of health disparities, analysis of health care technology, and analysis of health care systems and markets. This course will meet for 1.5-hour sessions, five times per week for six weeks.

Equivalent Course(s): PPHA 47900

#### HSTD 35100. Health Services Research Methods. 100 Units.

The purpose of this course is to better acquaint students with the methodological issues of research design and data analysis widely used in empirical health services research. To deal with these methods, the course will use a combination of readings, lectures, problem sets (using STATA), and discussion of applications. The course assumes that students have had a prior course in statistics, including the use of linear regression methods.

Instructor(s): T. Konetzka Terms Offered: Spring

Prerequisite(s): At least one course in linear regression and basic familiarity with STATA; or consent of instructor.

Equivalent Course(s): PPHA 38010,SSAD 46300

#### HSTD 35301. Aging and Health Policy. 100 Units.

This course is a seminar in aging and health policy and the relationships between policy, financing, access to care, and quality of care for the elderly. Â The focus is on health care systems and policy as opposed to demography and biological aspects of aging. Â Specific topics include Medicaid and Medicare policy; long-term care insurance and financing; workforce issues; dementia and end-of-life care; the culture change movement; work and retirement as it relates to health policy; and crossnational comparisons of health policy toward the elderly. Â Students will engage in an ongoing discussion of policy options and learn to evaluate their potential to improve quality and ensure access for the elderly to health care and long-term care. Equivalent Course(s): PPHA 42401,SSAD 49022

#### HSTD 35411. The U. S. Health Care System. 100 Units.

This course is a comprehensive examination of many of the key components of the U.S. health care system and how they work, intended for students from a wide range of backgrounds. Among others, topics may include public and private health insurance, the uninsured, health reform, hospitals, physicians, health care quality and costs, health information technology, pharmaceuticals, medical devices and diagnostics, long-term care, mental health services, and comparisons with health systems in developed and emerging markets

Instructor(s): F. Smieliauskas Terms Offered: Winter & Spring

Prerequisite(s): GPHAP requirement in Spring quarter: Non-GPHAP students with permission of instructor

Equivalent Course(s): PPHA 37510,SSAD 47512

#### HSTD 37100. Cost Effectiveness Analysis. 100 Units.

Cost Effectiveness Analysis (CEA) and Cost Utility Analysis (CUA) are widely used for the economic evaluation of health and medical treatments. Emphasis will be on understanding the basic foundations of CEA/CUA and the implications for the components in the evaluation. The course will address the measurement of health and medical effectiveness, health care and societal costs, and their integration into a formal assessment of alternative treatments. Applications from the literature will be used. By the end of the course, students are expected to be able to critique methods used in published papers.

Equivalent Course(s): PPHA 38200

#### HSTD 38400. Advanced Topics in Health Economics. 100 Units.

The purpose of this course is to provide substantial exposure to the state of the evidence and the major theoretical and empirical approaches used to study salient issues in health economics. Selected topics may vary from year to year; examples include health capital, health insurance, health behaviors, health care market structure and competition, not-for-profit ownership, payment incentives, and the effects of information on provider behavior (e.g. public reporting and value-based purchasing) and consumer behavior (e.g., advertising and medical decision making) Instructor(s): T. Konetzka, R. Conti

Prerequisite(s): Graduate courses in microeconomics and econometrics or statistics, including the use of linear and nonlinear regression methods.

#### HSTD 40500. Advanced Epidemiologic Methods. 100 Units.

This course examines some features of study design, but is primarily focused on analytic issues encountered in epidemiologic research. The objective of this course is to enable students to conduct thoughtful analysis of epidemiologic and other population research data. Concepts and methods that will be covered include: matching, sampling, conditional logistic regression, survival analysis, ordinal and polytomous logistic regressions, multiple imputation, and screening and diagnostic test evaluation. The course follows in sequence the material presented in "Epidemiologic Methods."

Instructor(s): D. Huo Terms Offered: Spring

Prerequisite(s): HSTD 31001



## DEPARTMENT OF HUMAN GENETICS

Interim Chair: Carole Ober

#### **Professors**

- Habibul Ahsan, Health Studies
- · Graeme Bell, Biochemistry and Molecular Biology
- Nancy Jean Cox, Medicine
- Soma Das
- Anna Di Rienzo
- T. Conrad Gilliam
- · Richard Hudson, Ecology and Evolution
- Bruce T. Lahn
- Michelle M. Le Beau, Medicine
- Elizabeth McNally, Medicine
- Mary Sara McPeek, Statistics
- Carole Ober
- Janet D. Rowley, Medicine
- · Andrey Rzhetsky, Medicine
- Matthew Stephens
- Joe Thornton
- Olufunmilayo Olopade, Medicine
- Darrel J. Waggoner
- · Kevin White

Associate Professors

- Mark Abney
- · Yoav Gilad
- · Marcelo Nobrega
- John Novembre
- Abraham Palmer
- Marion Verp, Obstetrics and Gynecology

**Assistant Professors** 

- Daniela Del Gaudio
- Vincent J. Lynch

The Department of Human Genetics offers training in a number of fields of human genetics such as human disease, classical genetics, complex trait genetics, population and evolutionary genetics, cytogenetics, neurogenetics, systems biology, pharmacogenetics and developmental human genetics. This coursework is intended for graduate students who plan to pursue research careers and teaching in the emerging areas of modern biology, and is intended for medical students, advanced undergraduate and graduate students in other programs. The Ph.D. program places

great emphasis on sound preparation in human genetics, statistical genetics, and molecular biology.

#### THE DEGREE OF DOCTOR OF PHILOSOPHY

A Ph.D. candidate must fulfill certain formal coursework requirements, pass one preliminary and one qualifying examination, and present a satisfactory dissertation describing the results of original research.

The department expects a knowledge of and proficiency in human genetics. This requirement will normally be met by fulfilling the formal coursework described here, but degree programs are flexible. Courses taken at other institutions, in other programs, or as part of the Pritzker School of Medicine curriculum may substitute for HG courses with approval of the Curriculum Committee. To fulfill the requirements for a Ph.D., nine graded courses are required. In the Department of Human Genetics, a student must take the following three required courses:

MGCB 31400	Genetic Analysis of Model Organisms	100		
HGEN 47000	Human Genetics-1	100		
HGEN 46900	Human Variation and Disease	100		
One of the following:				
HGEN 47100	Intro Statistical Genetics	100		
MGCB 31500	Genetic Mechanisms	100		
DVBI 35600	Vertebrate Developmental	100		
MGCB 31300	Molecular Biology-II	100		
ECEV 35600	Principles of Population Genetics-1	100		

The remaining 4 courses are electives chosen from a host of courses in the Biological Sciences Division and Statistics Department. All courses are to be approved by an assigned academic advisor. These courses and many more are designed to develop greater proficiency in your particular sub discipline.

A student is also required to do two laboratory rotations before selecting an advisor and laboratory in which to pursue a Ph.D. dissertation. These rotations will be graded and together will be equivalent to one elective. All students are required to serve as a teaching assistant for two quarters.

During the second year, students select a thesis advisor and begin laboratory research. To complete the Ph.D. degree, they must prepare, under the general direction of an appointed doctoral committee, a dissertation based upon their original research. A public seminar describing the results of the dissertation research must be presented and the dissertation must be successfully defended before the doctoral committee.

#### APPLICATION

For information about applying to our graduate program, please visit our website at http://molbio.bsd.uchicago.edu/index.php.

#### **HUMAN GENETICS COURSES**

#### HGEN 30400. Protein Fundamentals. 100 Units.

The course covers the physical-chemical phenomena that define protein structure and function. Topics include: the principles of protein folding, molecular motion and molecular recognition; protein evolution, design and engineering; enzyme catalysis; regulation of protein function and molecular machines; proteomics and systems biology. Workshop on X-ray Crystallography: The workshop is an addendum to Protein Fundamentals and is required for all BCMB students. This one week workshop will provide students with an intensive introduction to protein structure determination by x-ray crystallography. In addition to lectures, an extensive laboratory component will give students the opportunity to carry out protein crystallization, data collection (at Argonne), structure determination, refinement, model building and validation.

Instructor(s): R. Keenan, S. Koide, J. Piccirilli Terms Offered: Autumn Equivalent Course(s): BCMB 30400,MGCB 30400

#### HGEN 31100. Evolution of Biological Molecules. 100 Units.

The course connects evolutionary changes imprinted in genes and genomes with the structure, function and behavior of the encoded protein and RNA molecules. Central themes are the mechanisms and dynamics by which molecular structure and function evolve, how protein/RNA architecture shapes evolutionary trajectories, and how patterns in present-day sequence can be interpreted to reveal the interplay data of evolutionary history and molecular properties. Core concepts in macromolecule biochemistry (folding and stability of proteins and RNA, structure-function relationships, kinetics, catalysis) and molecular evolution (selection, mutation, drift, epistasis, effective population size, phylogenetics) will be taught, and the interplay between them explored.

Instructor(s): A. Drummond, J. Thornton Terms Offered: Winter Prerequisite(s): Comfort with basic computer programming (course will use Python and R); undergraduate biology, chemistry, calculus, and introductory statistics. Equivalent Course(s): ECEV 31100,BCMB 31100

#### HGEN 31400. Genetic Analysis of Model Organisms. 100 Units.

Fundamental principles of genetics discussed in the context of current approaches to mapping and functional characterization of genes. The relative strengths and weaknesses of leading model organisms are emphasized via problem-solving and critical reading of original literature.

Instructor(s): A. Palmer, D. Bishop, E. Ferguson, J. Malamy Terms Offered: Autumn Equivalent Course(s): DVBI 31400,BCMB 31400,MGCB 31400

#### HGEN 31600. Cell Biology I. 100 Units.

Eukaryotic protein traffic and related topics, including molecular motors and cytoskeletal dynamics, organelle architecture and biogenesis, protein translocation and sorting, compartmentalization in the secretory pathway, endocytosis and exocytosis, and mechanisms and regulation of membrane fusion.

Instructor(s): Aaron Turkewitz, Ben Glick Terms Offered: Autumn Quarter

#### HGEN 31900. Introduction to Research. 100 Units.

Lectures on current research by departmental faculty and other invited speakers. A required course for all first-year graduate students

Instructor(s): Staff Terms Offered: Autumn, Winter

Equivalent Course(s): MGCB 31900,BCMB 31900,DVBI 31900,GENE 31900

#### HGEN 40400. Thesis Research. Units.

Instructor(s): A DiRienzo Terms Offered: Autumn, Winter, Spring, Summer

#### HGEN 46900. Human Variation and Disease. 100 Units.

This course focuses on principles of population and evolutionary genetics and complex trait mapping as they apply to humans. It will include the discussion of genetic variation and disease mappeing data. Spring#

#### HGEN 47000. Human Genetics-1. 100 Units.

This course covers classical and modern approaches to studying cytogenic, Mendelian, and complex diseases. Topics include chromosome biology, single gene and complex disease, non-Mendelian inheritance, cancer genetics, human population genetics, and genomics. The format includes lectures and student presentations. Autumn

#### HGEN 47100. Intro Statistical Genetics. 100 Units.

This course focuses on genetic models for compex human disorders and quantitative traits. Topics covered also include linkage and linkage disequilibrium mapping and genetic models for complex traits, and the explicit and implicit assumptions of such models. Winter

Equivalent Course(s): BIOS 21216

#### HGEN 47300. Genomics and Systems Biology. 100 Units.

This lecture course explores the technologies that enable high-throughput collection of genomic-scale data, including sequencing, genotyping, gene expression profiling, assays of copy number variation, protein expression and protein-protein interaction. We also cover study design and statistical analysis of large data sets, as well as how data from different sources can be used to understand regulatory networks (i.e., systems). Statistical tools introduced include linear models, likelihood-based inference, supervised and unsupervised learning techniques, methods for assessing quality of data, hidden Markov models, and controlling for false discovery rates in large data sets. Readings are drawn from the primary literature.

Instructor(s): Y. Gilad, D. Nicolae Terms Offered: Spring

Prerequisite(s): STAT 23400 or Statistics in the Biomath Sequence

Equivalent Course(s): BIOS 28407, BPHS 47300, CABI 47300, IMMU 47300

HGEN 47400. Introduction to Probability and Statistics for Geneticists. 100 Units.

This course is an introduction to basic probability theory and statisticalo methods useful for people who intend to do research in genetics or a similar scientific field. Topics include random variable and probability distributions, descriptive statistics, hypothesis testing and parameter estimation. Problem sets and tests will include both solving problems analytically and analysis of data using the R statistical computing environment.

Instructor(s): Abney, Skol Terms Offered: Autumn



### COMMITTEE ON IMMUNOLOGY

#### Chair

- Alexander Chervonsky Professors
- · Maria Luisa Alegre, Medicine
- Albert Bendelac, Pathology
- · Eugene Chang, Medicine
- Anita Chong, Surgery
- Marcus Clark, Medicine
- · Aaron Dinner, Chemistry
- Yang Xin Fu, Pathology
- · Thomas Gajewski, Pathology and Medicine
- Tatyana Golovkina, Microbiology
- · Bana Jabri, Medicine
- Vinay Kumar, Pathology
- · Rima McLeod, Surgery
- Cathryn Nagler, Pathology
- Anthony Reder, Neurology
- · Raymond Roos, Neurology
- · Hans Schreiber, Pathology
- Ursula B. Storb, Molecular Genetics and Cell Biology
- Jerrold Turner, Pathology
- Martin Weigert, Pathology

**Associate Professors** 

- Erin Adams, Biochemistry and Molecular Biology
- Yoav Gilad, Human Genetics
- Juliane Bubeck Wardenburg, Pediatrics
- · Alexander Chervonsky, Pathology
- · Barbara Kee, Pathology
- Kay Macleod, Ben May Department for Cancer Research
- Avertano Noronha, Neurology
- Glenn Randall, Microbiology
- Anne I. Sperling, Medicine
- Patrick Wilson, Medicine Assistant Professors
- · Kenneth Cohen, Medicine
- Jill De Jong, Pediatrics
- · Fotini Gounari, Medicine

- Haochu Huang, Medicine
- Justin Kline, Medicine
- Vu Nguyen, Medicine
- · Peter Savage, Pathology
- · Dorothy Sipkins, Medicine
- Yu Ping, Medicine
- Jian Zhang, Medicine

The Committee on Immunology offers a graduate program of study leading to the Doctor of Philosophy degree in Immunology. The committee is dedicated to the open exchange of ideas among scholars of all fields, a commitment enhanced by an organizational structure that completely integrates the basic biological sciences with the clinical sciences. This multidisciplinary and integrated approach corresponds well with the reality of the new biology, where molecular and structural techniques are applied widely and with great success to clinical problems.

The Committee on Immunology is a member of the Biomedical Sciences Cluster, which also includes graduate programs from the Committee on Cancer Biology, Committee on Microbiology, the Committee on Molecular Metabolism and Nutrition, and the Department of Pathology's Molecular Pathogenesis and Molecular Medicine Graduate Program. The five academic units share several common courses, a seminar series and additional common events for students and faculty within the cluster. The goal of the cluster system is to encourage interdisciplinary interactions among both trainees and faculty, and to allow students flexibility in designing their particular course of study.

In addition to formal course work, the Committee on Immunology sponsors a weekly seminar series, an annual retreat where students and faculty present their research, and several focused group meetings.

#### ADMISSION

Prospective students interested in obtaining the Ph.D. in Immunology should submit an application to the Biological Sciences Division by December 1st of each year; indicate their cluster of interest as Biomedical Sciences and select Immunology as their proposed degree program.

#### THE DEGREE OF DOCTOR OF PHILOSOPHY

Ph.D. requirements include:

- Completion of 9 course credits consisting of basic science, immunology and elective courses.
- A preliminary examination in the form of an oral defense.
- A dissertation based on original research.
- · A final thesis examination.

#### **IMMUNOLOGY COURSES**

#### IMMU 30010. Immunopathology. 100 Units.

Five examples of diseases are selected each year among the following categories: autoimmune diseases, inflammatory bowel diseases, infection immunity, immunodeficiencies and gene therapy, and transplantation and tumor immunology. Each disease is studied in depth with general lectures that include, where applicable, histological analysis of diseased tissue samples and discussions of primary research papers on experimental disease models. Special emphasis is placed on understanding immunopathology within the framework of general immunological concepts and on experimental approaches to the study of immunopathological models.

Instructor(s): B. Jabri Terms Offered: Winter

Prerequisite(s): Consent of instructor

Equivalent Course(s): BIOS 25258,PATH 30010

#### IMMU 30266. Molecular Immunology. 100 Units.

This discussion-oriented course examines the molecular principles of immune recognition. We explore the roles of protein modification, protein-protein and protein-DNA interactions in the discrimination between self and non-self, and study the molecular fundamentals of cell stimulation and signaling. Primary literature focused on molecular research of the immune system is integrated with lectures on commonly used biochemical, structural and immunological techniques used in the research papers examined.

Instructor(s): E. Adams Terms Offered: Spring

Prerequisite(s): BIOS 20200 or 25256, or consent of instructor

#### IMMU 31200. Host Pathogen Interactions. 100 Units.

This course explores the basic principles of host defense against pathogens, including evolutionary aspects of innate and adaptive immunity and immune evasion strategies. Specific examples of viral and bacterial interactions with their hosts are studied in depth. A review of immunological mechanisms involved in specific cases is incorporated in the course.

Instructor(s): A. Chervonsky Terms Offered: Autumn

Equivalent Course(s): MICR 31200

#### IMMU 31500. Advanced Immunology 1. 100 Units.

This course explores the basic principles of the immune system, including tolerance, the development and differentiation of lymphocyte subsets, the regulation of the class of immune responses, memory, cell homing and migration, cell-cell interactions, antigen presentation and recognition.

Instructor(s): A. Bendelac Terms Offered: Winter

#### IMMU 32000. Advanced Immunology 2. 100 Units.

This class will explore the molecular and biochemical mechanisms by which lymphocytes develop and are activated in response to antigen. This will include the signal transduction pathways and transcriptional networks involved in these processes, as well as the molecular mechanisms underlying the generation of receptor diversity.

Instructor(s): B. Kee Terms Offered: Spring

#### IMMU 35500. Selected Topics in Immunology. 100 Units.

This course involves an in depth analysis of a particular topic in Immunology, which will vary from year to year. Emphasis will be placed on development of critical thought in evaluation of scientific literature and the course may conclude with the writing of grant proposals and their review in a student-led study section. Recent courses have included: (1) Animal models and clinical issues in transplantation, airway inflammation and cancer.

Instructor(s): M. Alegre, A. Sperling Terms Offered: Spring

#### IMMU 37000. Mucosal Immunology. 100 Units.

This course addresses how the gut associated lymphoid tissue distinguishes innocuous dietary antigens and commensal bacteria from pathogenic microbes and mounts an appropriate response. The realization that we live in a dynamic relationship with the trillions of bacteria that form the commensal microbiome has added additional complexity to our understanding of this conundrum. In this course a topic will be introduced with a lecture and review article for the first class of each week. In the second class each week students will lead the discussion of the primary articles assigned. The course will be graded on class participation and a final essay-based exam. Prerequisites: An introductory course in immunology is required. Although intended primarily for graduate students in the Immunology, Microbiology, MPMM and CMMN programs, undergraduates may enroll with the permission of the instructor.#

Instructor(s): C. Nagler Terms Offered: Spring

#### IMMU 40200. Experimental Immunology. 050 Units.

This course centers around the Immunology Journal Club and the Immunology Seminar Series and has two purposes. The first is to provide background knowledge for the seminar given each week by an outside speaker or a member of the Committee on Immunology. The second is to allow the students an opportunity to develop skills in analyzing the literature with students at the same stage of training. First and second year students are required to participate in this course. The two-year course counts towards one credit.

Instructor(s): Staff Terms Offered: Autumn, Winter, Spring

## IMMU 40300. Systems Analysis of Proteins and Post-Translational Modifications. 100 Units.

Proteins play a major role in all cellular processes and their modification represents a major vehicle for expanding the genetic code of the cellular proteome (the inventory of all protein species in a cell). Given the crucial roles in the major cellular pathways and diseases such as cancer, proteins and PTM studies are a critical aspect of most biological projects. This course will cover concepts (including biochemistry, proteomics/systems biology, molecular biology, and bioinformatics), and practical techniques for identifying and quantifying proteins and PTMs. Topics include, but are not limited to quantification of protein interactions, abundances, modifications including phosphorylation, ubiquitination, and lysine acetylation, and subsequent discussion of biochemical and functional roles of proteins and PTMs in regulating biological networks.

Instructor(s): R. Jones, Y. Zhao Terms Offered: Spring

Prerequisite(s): BIOS 20200

Equivalent Course(s): BIOS 21346, CABI 40300, MOMN 40300

#### IMMU 47300. Genomics and Systems Biology. 100 Units.

This lecture course explores the technologies that enable high-throughput collection of genomic-scale data, including sequencing, genotyping, gene expression profiling, assays of copy number variation, protein expression and protein-protein interaction. We also cover study design and statistical analysis of large data sets, as well as how data from different sources can be used to understand regulatory networks (i.e., systems). Statistical tools introduced include linear models, likelihood-based inference, supervised and unsupervised learning techniques, methods for assessing quality of data, hidden Markov models, and controlling for false discovery rates in large data sets. Readings are drawn from the primary literature.

Instructor(s): Y. Gilad, D. Nicolae Terms Offered: Spring

Prerequisite(s): STAT 23400 or Statistics in the Biomath Sequence

Equivalent Course(s): BIOS 28407, BPHS 47300, CABI 47300, HGEN 47300



# THE INTERDISCIPLINARY SCIENTIST TRAINING PROGRAM

The Interdisciplinary Scientist Training Program (ISTP) is a doctoral-degree granting program within the Division of the Biological Sciences at the University of Chicago, awarding a Ph.D. degree in biology. The core mission of the Program is to train graduate students in interdisciplinary approaches and foster novel, multifaceted analyses of biological systems and processes.

Central to the program is the recruitment of unusual students with an aptitude and demonstrable interest in interdisciplinary biological science. Coursework is flexible and individually tailored depending on the student's background and interests. Students are strongly encouraged to pursue research projects that involve interdisciplinary collaborations between two or more members of the training faculty. A subset of ISTP students are part of a strategic training partnership between Chicago and the Howard Hughes Medical Institute's Janelia Farm Research Campus (JFRC).

In addition to the BSD application requirements, students must submit a brief description of a proposed Ph.D. research project, designed to span the research interests of two or more participating faculty trainers. We expect that students who are selected for interviews for the ISTP will be highly committed, well-prepared and ready to pursue challenging research projects. During the interview process, candidates will be provided extensive opportunities to discuss their proposed research with their potential advisors and will present their proposals orally to a committee. Selection into the program will be based on academic credentials, letters of recommendation, preparation and motivation for interdisciplinary training and quality of research ideas.

Incoming students are advised by the program director in consultation with a relevant member of the steering committee or program faculty to select courses and formulate individual programs of study. This steering committee or program faculty member provides oversight and guidance for the trainee in their first year. New trainees are introduced to the ISTP in an annual orientation session. Members of the steering committee and current ISTP trainees also participate in the orientation session.

All students are strongly encouraged to pursue research projects that involve interdisciplinary collaborations between two or more members of the training faculty. Students choose two faculty mentors as advisors from among the program training facility. Once the advisors are chosen, a thesis committee is constituted which is typically comprised of four members of the faculty. The chairperson of this committee is a faculty member other than the thesis mentors. The thesis committee is responsible for evaluating the thesis research proposal and its defense as well as monitoring the student's progress on a yearly basis. ISTP trainees participate in an annual symposium—the venue for the symposium involves both the UC and JFRC campuses. Both participating students and faculty present research talks.

Further information about the program is available from:

Nicole Kaminski-Ozturk, Administrative Director, Interdisciplinary Scientist Training Program, NicKaminski@uchicago.edu

Daniel Margoliash, Ph.D., Director, Interdisciplinary Scientist Training Program, dan@bigbird.uchicago.edu



## COMMITTEE ON MEDICAL PHYSICS

#### Chair

Samuel G. Armato

#### Associate Chair

Charles A. Pelizzari

#### Professors

Maryellen L. Giger, Radiology David J. Grdina, Radiation and Cellular Oncology Howard J. Halpern, Radiation and Cellular Oncology Gregory S. Karczmar, Radiology Xiaochuan Pan, Radiology

#### **Associate Professors**

Samuel G. Armato, Radiology Bulent Aydogan, Radiation and Cellular Oncology Chin-Tu Chen, Radiology Yulei Jiang, Radiology Chien-Min Kao, Radiology Patrick La Riviere, Radiology Zheng Feng Lu, Radiology Bill O'Brien-Penney, Radiology Charles A. Pelizzari, Radiation and Cellular Oncology Chester S. Reft, Radiation and Cellular Oncology Kamil M. Yenice, Radiation and Cellular Oncology

#### **Assistant Professors**

Hania A. Al-Hallaq, Radiation and Cellular Oncology Naim Ozturk, Radiation and Cellular Oncology Steffen Sammet, Radiology Rodney D. Wiersma, Radiation and Cellular Oncology

#### **Emeritus Professors**

Kunio Doi, Radiology

Franca T. Kuchnir, Radiation and Cellular Oncology

David N. Levin, Radiology

The Committee on Medical Physics includes the Graduate Program in Medical Physics, which is recognized internationally for its research excellence. Faculty with primary interest in diagnostic imaging hold appointments in the Department of Radiology, and faculty with primary interest in the physics of radiation therapy hold appointments in the Department of Radiation and Cellular Oncology. Many of the faculty are leaders in their respective specialties. Because the departments are located in the Medical Center of the University, there is strong interaction among the clinical and research faculty and staff. The Committee on Medical Physics offers programs leading to the Ph.D. degree in medical physics. Although most students are admitted directly for study toward the Ph.D. degree, the S.M. degree may occasionally be awarded as a terminal degree and in some cases as a transitional

degree en route to the Ph.D. Normally four or five years of residency are required for the Ph.D. degree.

In addition to the Graduate Program in Medical Physics, the Committee on Medical Physics has combined with the University of Chicago's Graham School to offer a Postgraduate Certificate in Medical Physics. This certificate program provides the necessary training for physicists who are interested in moving to medical physics with the knowledge that they will need in their future profession. Applicants must hold a Ph.D. in physics from either US or Canadian universities.

Inquiries concerning the certificate program should be addressed to Hania Al-Hallaq, Ph.D., Director of the Medical Physics Certificate Program, at:

hal-hallaq@radonc.bsd.uchicago.edu

Medical Physics researchers at the University have available to them a variety of state-of-the-art equipment:

- 1.5T MR scanners
- 3T MR scanner
- 9.4T MRI/MRS system
- Electron paramagnetic resonance imaging spectrometers
- 16-, 32-, and 64-slice helical CT scanners
- Advanced 256-slice helical cone-beam CT scanner
- Advanced 256-slice dual-energy helical cone-beam CT scanner
- Dual-energy chest radiography system
- Full-field digital mammography systems
- PET/CT scanner
- 30% sensitivity dual-head small animal PET scanner
- Computer controlled dual-energy linear accelerators with multileaf collimators, dynamic treatment capability, and solid-state megavoltage imagers and kilovoltage 2D and cone-beam imaging capabilities
- · Computer controlled high-dose-rate remote after loading brachytherapy system
- Virtual reality display system
- Computed radiography systems
- Multi-detector SPECT systems
- Cardiac first-pass gamma camera
- Single detector gamma camera
- Real-time quantitative PCR machine
- Zeiss surgical microscope
- · Harvard small animal ventilator
- Micro-interventricular pressure and volume catheters
- MRI-compatible fiber optic pressure transducer
- · Physiologic data acquisition and analysis system
- · Class II cell culture hood

- Zeissfluorescence microscope with associated CCD camera and image acquisition and analysis computer system
- Microplate reader
- Sorvall RC-6 high-speed ultracentrifuge
- · Bio-rad gel documentation and analysis workstation
- Epson 10000XL flat bed color scanner
- · Harshaw automated thermoluminescent reader
- Philips 250 kVp orthovoltage machine
- Diagnostic and mammography x-ray systems
- Dual-head SPECT systems
- Triple-head SPECT scanner
- Xenogen IVIS 200 for bioluminescence and fluorescence animal imaging
- VisEn FMT for fluorescence molecular tomography in animal imaging
- Olympus OV-100 for fluorescence animal imaging
- GMI/GE Triumph Flex microPET/SPECT/CT pre-clinical imaging system
- Vevo 770 ultrasound imaging system for animal imaging
- Super-resolution single-photon emission microscope (SPEM)
- High-resolution digital x-ray imaging system
- · Computer-aided detection system for mammography
- High-resolution display monitors and workstations
- General use and specialized image processing and display computers linked via a high-speed network

Please visit our website http://medicalphysics.uchicago.edu/ for more information.

Inquiries concerning the graduate program should be addressed to Sam Armato, Ph.D., Chair of the Committee on Medical Physics, Director of the Graduate Programs in Medical Physics, Department of Radiology, MC 2026, 5841 South Maryland Avenue, Chicago, IL 60637, or e-mail: s-armato@uchicago.edu

#### MEDICAL PHYSICS COURSES

#### MPHY 34200. Practicum in the Physics of Medical Imaging I. 100 Units.

This laboratory course is designed for students to enhance the understanding of materials covered in Medical Imaging (MPHY 38600) and to acquire hands-on experience on related subjects. These subjects include diagnostic x-ray sources and imaging systems, MRI, and the applications of computer-aided diagnosis. Instructor(s): M. Giger, Y. Jiang, S. Sammet Terms Offered: Winter

#### MPHY 34300. Practicum in the Physics of Medical Imaging II. 100 Units.

This laboratory course is designed to familiarize the medical physics student with certain equipment and procedures in diagnostic radiology, with emphasis on nuclear medicine (both PET and SPECT), ultrasonic and x-ray (helical) computed tomographic (CT) imaging. The students will conduct routine quality control procedures and educational exercises. Data analysis will be conducted using clinical software and freeware that will process DICOM images.

Instructor(s): B. O'Brien-Penney, Z.F. Lu Terms Offered: Winter

#### MPHY 34400. Practicum in the Physics of Radiation Therapy. 100 Units.

This course combines lectures and intensive hands-on experiments. It includes an introduction to thermoluminescent detectors, film and ionization chamber dosimetry, and quality assurance for intensity modulated radiation therapy (IMRT). Training in data acquisition, error analysis, experimental techniques and the safe handling of sealed radiation sources is also included. The basic concepts in Monte Carlo calculations will be presented and measurements made in simple slab phantoms to compare with MC calculations.

Instructor(s): H. Al-Hallaq, B. Aydogan, C. Reft Terms Offered: Spring

#### MPHY 34900. Mathematics for Medical Physics. 100 Units.

This course focuses on the mathematics that will be used throughout the training of students in the Graduate Programs in Medical Physics. Lectures are given on linear algebra, Fourier analysis, sampling theory, functions of random variables, stochastic processes, estimation theory, signal detection theory, and ROC analysis.

Instructor(s): M. Giger, P. La Riviere, X. Pan Terms Offered: Autumn

#### MPHY 35000. Interactions of Ionizing Radiation with Matter. 100 Units.

Ionizing radiation is the basis for radiation therapy and for many diagnostic imaging studies. This course explores the fundamental modes of interaction between ionizing radiation (both electromagnetic and particulate) and matter, with an emphasis on the physics of energy absorption in medical applications. Topics will include exponential attenuation, x-ray production, charged particle equilibrium, cavity theory, dosimetry, and ionization chambers.

Instructor(s): H. Al-Hallaq, S. Armato Terms Offered: Winter

#### MPHY 35100. Physics of Radiation Therapy. 100 Units.

This course covers aspects of radiation physics necessary for understanding modern radiation therapy. Rigorous theoretical foundations of physical dose calculation for megavoltage energy photons and electrons, biological predictions of therapy outcomes, and brachytherapy are presented. Methods of modeling and implementing radiation therapy treatment planning, evaluation, and delivery are described. Emphasis is placed on current developments in the field including intensity modulated radiation therapy. The course is intended to provide comprehensive knowledge of radiation therapy physics enabling the student to grasp current research in the field.

Instructor(s): N. Ozturk, R. Wiersma, K. Yenice Terms Offered: Spring

## MPHY 35601. Anatomical Structure and Physiological Function of the Human Body. 100 Units.

Study of the basic anatomy of the human body as demonstrated from cadavers and correlating diagnostic radiographic imaging. Physiological processes of body systems will be examined with an emphasis on its relationship with imaging. Instructor(s): B. Roman, C. Straus Terms Offered: Winter

#### MPHY 35900. Cancer and Radiation Biology. 100 Units.

This course provides students with an overview of the biology of cancer and of the current methods used to diagnose and treat the disease. Lectures from faculty throughout the Biological Sciences Division will include presentations on cancer incidence and mortality, cancer prevention, a molecular biology perspective, the role of genetic markers, methods of treatment (radiation, chemotherapy) and prognosis. The course will be primarily for medical physics graduate students. Instructor(s): D. Grdina, R. Miller, J. Murley Terms Offered: Winter

#### MPHY 38600. Physics of Medical Imaging I. 100 Units.

This is an introductory course to the basic elements of x-ray imaging, electron paramagnetic resonance (EPR) imaging, and magnetic resonance imaging (MRI) and spectroscopy (MRS). Topics covered on x-ray imaging include x-ray spectra, image formation, analog and digital detectors, physical measures of image quality, fluoroscopy, digital subtraction angiography, dual-energy imaging and image restoration. Topics covered on magnetic resonance imaging include nuclear magnetic resonance, relaxation times, pulse sequences, functional imaging and spectroscopy.

Instructor(s): H. Halpern, Y. Jiang, P. La Riviere, G. Karczmar, B. Roman Terms Offered: Summer

#### MPHY 38700. Physics of Medical Imaging II. 100 Units.

This course covers the physics, mathematics and statistics in nuclear medicine, x-ray computed tomography, ultrasound imaging, and optical imaging. Specific topics include: Radioactive Isotopes and Tracer Methodology; Physics, Instrumentation, and Performance Properties of Gamma Camera; Quality Control in Nuclear Medicine; SPECT imaging; Physics, Instrumentation and Performance Properties of PET Imaging; Biokinetics and Compartmental Analysis; Physics, Reconstruction, Proformance Properties for CT imaging and tomosynthesis; Principle and Instrumentation of Ultrasound Imaging; and Introduction to Optical Imaging. Instructor(s): C.M. Kao, P. La Riviere, B. O'Brien-Penney, E. Sidky Terms Offered: Winter

#### MPHY 39200. Diagnostic Clinical Physics. 100 Units.

This course provides the students with an understanding of the physical principles and theories involved in diagnostic imaging modalities. It will acquaint the student with the daily work of a clinical medical physicist in a Radiology department. This course will introduce concepts of quality control and will enable students to perform quality control scans on different imaging modalities.

Instructor(s): B. O'Brien-Penney, Z.F. Lu, S. Sammet Terms Offered: Spring

#### MPHY 39300. Physics in Clinical PET. 100 Units.

Instructor(s): B. O'Brien-Penney Terms Offered: Autumn

#### MPHY 39600. Image Processing and Computer Vision. 100 Units.

Introduction to the fundamental concepts and techniques widely used for processing and understanding digital images. The course will consist of a series of lectures and with "student projects to provide hands-on experience in various image processing techniques. Topics include: digital image properties, data structures for image analysis, image filtering (smoothing, edge detection, noise reduction), segmentation (region growing, mathematical morphology), feature extraction (histogram analysis, shape description), texture analysis (co-occurrence matrices, texture energy measures, fractals), pattern recognition (discriminant analysis, statistical pattern recognition, neural networks), and linear transforms (Fourier, discrete cosine, Hough, and wavelet transforms).

Instructor(s): S. Armato Terms Offered: Winter

#### MPHY 39700. Health Physics. 100 Units.

This course provides an introduction to fundamental principles of health physics and radiation protection in medical physics environments. A broad spectrum of topics is covered, including but not limited to, radiation detection and measurement, instrumentation, counting statistics, radiation protection criteria, exposure limits and regulations, shielding techniques, monitoring of personnel dose and radiation safety.

Instructor(s): B. Aydogan, N. Ozturk Terms Offered: Spring

#### MPHY 39900. Reading and Research. 100 Units.

This reading course is aimed at working through critical chapters of the text *Foundations of Image Science* by Harrison Barrett and Kyle Myers. It aims at building on concepts and material from the "Mathematics for Medical Physicists" course toward a deeper understanding the objective assessment of image quality. We will focus on Chapters 1 (Vectors and Operators), 7 (Deterministic Descriptions of Imaging Systems), 8 (Stochastic Descriptions of Objects and Images), 13 (Statistical Decision Theory), 14 (Image Quality), and 15 (Inverse Problems). Student participation is an essential component of this course. Students will take turns presenting and discussing the material under guidance of the instructor(s). There will also be computer exercises aimed at sharpening understanding of the material. Instructor(s): P. La Riviere, C.M. Kao Terms Offered: Winter (every other year)

#### MPHY 41700. Research in Medical Physics. 100-300 Units.

Research topics span various areas of medical physics and can include those from diagnostic imaging to radiation therapy treatment methods, as well as cross-disciplinary projects.

Instructor(s): M. Giger and Staff Terms Offered: All Quarters

#### MPHY 41800. Research in Advanced Tomographic Imaging. 100-300 Units.

Possible research topics include investigation, development, and evaluation of algorithms for advanced tomographic imaging, with emphases on the fundamental physics, mathematics, and statistics areas of advanced tomographic imaging. Possible tomographic imaging techniques will be covered include cone-beam computed tomography (CT), tomosynthesis, phase-contrast CT, magnetic resonance imaging (MRI), electron paramagnetic resonance imaging (EPRI), positron emission tomography (PET), single-photon emission computed tomography (SPECT), and emerging tomographic imaging techniques.

Instructor(s): X. Pan and Staff Terms Offered: All Quarters

#### MPHY 42000. Research in the Physics of Nuclear Medicine. 100-300 Units.

Possible research topics cover the fundamental physical aspects of nuclear medicine, including radiation detection and spectrum analysis; image formation, processing, and display; criteria for image evaluation; and quantitative in vivo assay using methods of gamma ray and positron tomography, stimulated x-ray fluorescence, and activation analysis.

Instructor(s): X. Pan and Staff Terms Offered: All Quarters

#### MPHY 42100. Research in the Physics of Diagnostic Radiology. 100-300 Units.

Possible research topics include the development of methods to improve diagnostic accuracy and/or to reduce patient radiation exposure; quantitative image analysis and computer-aided diagnosis, methods of tomographic reconstruction, analysis and evaluation of imaging system components; and joint physical/clinical studies of new techniques in diagnostic Medical Physics.

Instructor(s): M. Giger and Staff Terms Offered: All Quarters

#### MPHY 42200. Research Physics of Radiation Therapy. 100-300 Units.

Possible research topics can include radiation treatment planning; radiation dose calculations; intensity-modulated radiotherapy; image-guided radiotherapy; biological basis of radiation therapy; analysis of treatment outcomes; and others. Instructor(s): C. Pelizzari and Staff Terms Offered: All Quarters

#### MPHY 42400. Research in Image-Guided Radiation Therapy. 100-300 Units.

Possible research topics include fundamental aspects of image guidance in radiation therapy planning and delivery, management of inter-treatment and intra-treatment patient motion, use of respiratory correlated CT, cone beam CT, kV/MV real-time imaging, and dynamic patient modeling for treatment planning. Instructor(s): C. Pelizzari and Staff Terms Offered: All Quarters



### COMMITTEE ON MICROBIOLOGY

#### Chair

Olaf Schneewind

#### Professors

- Kenneth Alexander, Pediatrics
- Joy Bergelson, Ecology & Evolution
- Eugene B. Chang, Medicine
- · Robert Daum, Pediatrics
- Tatyana Golovkina, Microbiology
- Jean Greenberg, Molecular Genetics & Cell Biology
- Robert Haselkorn, Molecular Genetics & Cell Biology
- · Tao Pan, Biochemistry & Molecular Biology
- Bernard Roizman, Microbiology
- Raymond Roos, Neurology
- Lucia Rothman Denes, Molecular Genetics & Cell Biology
- Olaf Schneewind, Microbiology
- · Howard Shuman, Microbiology
- Wei Jen Tang, Ben May Department for Cancer Research Associate Professors
- Juliane Bubeck Wardenburg, Pediatrics and Microbiology
- · Alexander Chervonsky, Pathology
- · Joseph Kanabrocki, Microbiology
- Dominique Missiakas, Microbiology
- Glenn Randall, Microbiology

#### **Assistant Professors**

- Sean Crosson, Biochemistry and Molecular Biology
- · Seungmin Hwang, Pathology
- Balaji Manicassamy, Microbiology

The primary purpose of the Committee on Microbiology is to produce research scientists and teachers in microbiology by offering formal instructions; by fostering informal dissemination of information among the faculty, fellows and students engaged in research in microbiology; and by administering a program of study leading to the degree of Doctor of Philosophy. Through its faculty, activities and educational program, the Committee on Microbiology integrates studies in various clinical and non clinical departments of the Division of the Biological Sciences. The Committee on Microbiology maintains maximum flexibility in its program to cater to students developing interests. Students with backgrounds in any appropriate field (physics, chemistry, biology, biochemistry, and medicine) may commence work in microbiology upon entering the graduate program of the Division of the Biological Sciences. The Committee on Microbiology sponsors a seminar series,

which brings to campus prominent microbiologists from all over the world to discuss their research and meet with Microbiology faculty and students. Another regular activity sponsored by the Committee is the Microbiology Data Club. Data Club meetings feature a current graduate student, postdoctoral fellow or other training fellow in Microbiology presenting his/her research data. Microbiology Data Club meetings are open to the University community, offering an informal forum for the discussion of microbiology within the Chicago scientific community.

The Committee on Microbiology is a member of the Biomedical Sciences Cluster, which also houses graduate programs of the Committee on Cancer Biology, the Committee on Immunology, the Committee on Molecular Metabolism and Nutrition, and the Department of Pathology's Molecular Pathogenesis and Molecular Medicine Graduate Program. The five academic units share a joint admissions committee, several courses, a seminar series and other events for students and faculty within the cluster. The goal of the cluster system is to encourage interdisciplinary interactions among both trainees and faculty, and to allow students flexibility in designing their particular course of study. The Ph.D. degree is administered by the Committee on Microbiology and is recommended when the student has fulfilled the requirements stipulated in his individual program; has met the divisional requirements for the degree; and, in the opinion of the committee, has attained competence in research in his or her field of specialization.

#### MICROBIOLOGY COURSES

#### MICR 30600. Fundamentals of Bacterial Physiology. 100 Units.

This course meets one of the requirements of the microbiology specialization. This course introduces bacterial diversity, physiology, ultra-structure, envelope assembly, metabolism, and genetics. In the discussion section, students review recent original experimental work in the field of bacterial physiology.

Instructor(s): D. Missiakas Terms Offered: Autumn

Prerequisite(s): BIOS 20181, 20191, or 20239/20234; or consent of instructor

Equivalent Course(s): BIOS 25206

#### MICR 31200. Host Pathogen Interactions. 100 Units.

This course explores the basic principles of host defense against pathogens, including evolutionary aspects of innate and adaptive immunity and immune evasion strategies. Specific examples of viral and bacterial interactions with their hosts are studied in depth. A review of immunological mechanisms involved in specific cases is incorporated in the course.

Instructor(s): A. Chervonsky Terms Offered: Autumn

Equivalent Course(s): IMMU 31200

#### MICR 31600. Molecular Basis of Bacterial Diseases. 100 Units.

This course meets one of the requirements of the microbiology specialization. This lecture/discussion course involves a comprehensive analysis of bacterial pathogens, the diseases that they cause, and the molecular mechanisms involved during pathogenesis. Students discuss recent original experimental work in the field of bacterial pathogenesis.

Instructor(s): H. Shuman Terms Offered: Winter

Prerequisite(s): Completion of the general education requirement in the biological sciences

Equivalent Course(s): BIOS 25216

#### MICR 34000. Bacterial Pathogenesis. 100 Units.

Bacterial pathogens of human, animal and plant organisms, their infectious strategies and molecular mechanisms of causing disease.

Instructor(s): D. Missiakas, O. Schneewind, H. Shuman Terms Offered: Winter Prerequisite(s): Completion of the general education requirement in the Biological Sciences. Consent required.

#### MICR 34600. Introduction to Virology. 100 Units.

This class on animal viruses considers the major families of the viral kingdom with an emphasis on the molecular aspects of genome expression and virushost interactions. Our goal is to provide students with solid appreciation of basic knowledge, as well as instruction on the frontiers of virus research.

Instructor(s): T. Golovkina, B. Roizman Terms Offered: Spring

Prerequisite(s): Completion of the general education requirement in the biological sciences and third- or fourth-year standing

Equivalent Course(s): BIOS 25287

#### MICR 35900. Medical Microbiology. 125 Units.

Provides an overview of the clinically important microorganisms and their role in the causation of human infectious disease. The objectives of the course are to discuss mechanisms of microbial pathogenesis and host manifestations of disease, provide knowledge of the common organisms associated with specific infectious disease presentations as foundation for a system (organ)-based approach to diagnosis, and to describe the role of the clinical diagnostic laboratory in identification of pathogens and disease management. Lectures are held three days a week in 50-minute periods. Additionally, students attend weekly laboratory sessions during the quarter and participate in student-led case-based discussion groups with a faculty preceptor on a weekly basis. Two multiple-choice exams are administered, as well as a final laboratory practical exam and several laboratory quizzes.

Instructor(s): J. Benoit, G. Randall, O. Schneewind Terms Offered: Spring 2012 Prerequisite(s): Second year medical students only or consent of instructor

#### MICR 39000. Introduction to Experimental Microbiology. 100 Units.

The Committee on Microbiology will host a seminar series comprised of seven to ten presentations by faculty invited from other institutions. A reading and discussion session will accompany the seminar series. In the session, which meets for one hour on a day preceding each week's seminar, first year graduate students will discuss with their peers and a Microbiology faculty member three original research papers of the invited speaker. Following the seminar and the conventional question and answer period, first year graduate students of the Committee on Microbiology are invited to question the speaker on her or his research and to discuss their own research for a period of 1 hour. In this manner, we will provide students with an intellectual environment that reveals the discovery process and research frontiers in various laboratories and fields. First year graduate students are required to register for the course.

Instructor(s): O. Schneewind Terms Offered: Autumn, Winter, and Spring

#### MICR 40000. Microbiology Research Forum. 100 Units.

All graduate students and honors undergraduate students of the Committee on Microbiology will present their research in a central forum, the data club, once each year. Students and postdoctoral fellows present their recent research data for critical evaluation by the faculty of the Committee on Microbiology. This course provides a forum to ensure continued progress of graduate students in their thesis projects. First year graduate students are required to register for the course. Instructor(s): O. Schneewind Terms Offered: Autumn, Winter, and Spring



# COMMITTEE ON MOLECULAR METABOLISM AND NUTRITION

#### Chair

- Christopher Rhodes Professors
- Maria-Luisa Alegre, Medicine
- John Alverdy, Surgery
- George Bakris, Medicine
- · Graeme Bell, Medicine
- Deborah Burnet, Medicine
- Eugene Chang, Medicine
- Anita Chong, Surgery
- Suzanne Conzen, Medicine
- · Nancy Cox, Medicine
- Anna DiRienzo, Human Genetics
- David Ehrmann, Medicine
- Murray Favus, Medicine
- Bana Jabri, Medicine
- James Liao, Medicine
- J. Michael Millis, Transplant Surgery
- · Deborah Nelson, Neurobiology, Pharmacology and Physiology
- Louis Philipson, Medicine
- · Victoria Prince, Organismal Biology and Anatomy
- · Christopher Rhodes, Medicine
- · Carol Semrad, Medicine
- F. Gary Toback, Medicine
- Jerrold Turner, Pathology
- Eve Van Cauter, Medicine
- · Roy Weiss, Medicine
- Yingming Zhao, Ben May Department for Cancer Research Associate Professors
- Marc Bissonnette, Medicine
- · Matthew Brady, Medicine
- Alexander Chervonsky, Pathology
- · Ronald Cohen, Medicine
- · Helen Kim, Obstetrics & Gynecology and Pediatrics
- Yan Chun Li, Medicine

- Kay Macleod, Ben May Department for Cancer Research
- Jeremy Marks, Pediatrics
- Vivek Prachand, Surgery
- Xiaoxi Zhuang, Department of Neurobiology Assistant Professor
- · Lev Becker, Pediatrics
- Eunice Chen, Psychiatry & Behavioral Neuroscience
- Diane Deplewski, Pediatrics
- Kristen Knutson, Medicine
- · John Kwon, Medicine
- Robert Sargis, Medicine
- Esra Tasali, Medicine
- Barton Wicksteed, Medicine Research Associate (Professor)
- Catherine Reardon Alulis, Pathology Research Associate (Assistant Professor)
- Mark Musch, Medicine

The Committee on Molecular Metabolism and Nutrition is a dynamic and interactive research unit of the University of Chicago offering interdisciplinary doctoral training in the molecular basis of biological processes as they relate to nutrition and human disease. The graduate program in Molecular Metabolism and Nutrition offers a program of study leading to the Doctor of Philosophy in Molecular Metabolism and Nutrition. Faculty expertise includes the areas of insulin secretion, diabetes genetics, nutritional regulation of epithelial cell biology, intestinal absorption, adaptation, and malabsorption, water/nutrient/electrolyte transport, nutriceuticals, atherogenesis, abnormalities in lipid and lipoprotein metabolism, vitamin D research, insulin metabolic signaling, transcription factors and adipogenesis, impact of nutrition on reproductive biology, glucocorticoid action and sleep research. A mixture of nationally recognized senior faculty and dynamic junior faculty provide a stimulating and supportive environment designed to guide graduate students through course work and research training. Major resources include transgenic mouse facilities, flow cytometry, microscope imaging suites, microarray and gene chip facilities, computational labs and facilities for human research. The Committee works closely with the government sponsored Diabetes Research and Training Center, Digestive Disease Research Core Center, Training Program in Digestive Diseases and Nutrition, and the Clinical Research Center to offer a broad array of choices for research topics.

The Committee on Molecular Metabolism and Nutrition is a member of the Biomedical Sciences Cluster, which also includes graduate programs from the Committee on Cancer Biology, the Committee on Immunology, the Committee on Microbiology and the Department of Pathology's Molecular Pathogenesis and Molecular Medicine Graduate Program. The five academic units share several common courses, a seminar series, and additional common events for students

and faculty within the cluster. The goal of the cluster system is to encourage interdisciplinary interactions among both trainees and faculty, and to allow students flexibility in designing their particular course of study.

#### **ADMISSION**

Students interested in obtaining the Ph.D. in Molecular Metabolism and Nutrition should submit an application to the Biological Sciences Division by December 1st of each year; indicate their cluster of interest as Biomedical Sciences and select Molecular Metabolism and Nutrition as their proposed degree program.

#### THE DEGREE OF DOCTOR OF PHILOSOPHY

Ph.D. requirements include:

- Completion of 9.5 course credits consisting of basic science, metabolism and elective courses.
- A preliminary exam in the form of a mock NIH-style grant proposal.
- A dissertation based on original research.
- A final thesis examination.

#### MOLECULAR METABOLISM AND NUTRITION COURSES

#### MOMN 30901. Molecular Basis of Metabolic Disease. 100 Units.

This course selects topics in nutrition in which modern molecular and cell biology provide a greater understanding of the regulation of these metabolic pathways. Instructor(s): B. Wicksteed Terms Offered: Autumn

Equivalent Course(s): MPMM 30901

#### MOMN 30910. Grant Writing. 100 Units.

Students will gain extensive exposure to the grant writing and review processes. Several speakers will lecture on the various funding agencies, types of grants, and general approaches to grant writing. Students will read funded applications from CMMN faculty to learn the proper approaches for successful grant writing, including responding to reviewers' critiques. Students will be expected to complete a 20-25 page R01 style grant application by the end of the quarter, which will fulfill the mock grant proposal requirement for the CMMN students. The course culminates with a mock grant review panel in which the students read and critique each other's applications.

Instructor(s): M. Brady Terms Offered: Winter

#### MOMN 36500. Molecular Nutrition I. 100 Units.

Students are exposed to a comprehensive review of nutritional physiology and requirements, including the regulated digestion, synthesis and/or metabolism of vitamins, minerals, lipids, proteins and carbohydrates. Various lecturers specialized in specific areas of metabolic research participate throughout the quarter. The course culminates with the students writing a comprehensive paper linking several of the topics covered throughout the quarter.

Instructor(s): C. Reardon and staff Terms Offered: Autumn

#### MOMN 36600. Molecular Nutrition II. 100 Units.

This course is an extension of Molecular Nutrition 1 and investigates the physiological control of systemic metabolism. Heavy emphasis is placed on the coordinate regulation of glucose and lipid metabolism by skeletal muscle, liver, adipose tissue, pancreas and brain. The format of the course is a combination of lectures and student presentations of primary literature. At the end of the course, students are expected to write a grant application to investigate a current area of metabolism research and then present and defend the proposal to the lecturers and students

Instructor(s): M. Brady, C. Reardon, Staff Terms Offered: Winter Equivalent Course(s): MPMM 36600

#### MOMN 40200. Topics in Nutrition Research. 100 Units.

This course is conducted as a seminar series. Students will broaden their exposure to metabolism related research through bi-weekly faculty and student presentations of research data and primary literature. Additionally, prominent researchers from other institutions are invited to give a seminar and meet alone with the students to discuss their career paths, experiences in running successfully funded labs and use of cutting edge experimental approaches. Attendance is mandatory for first and second year students but all students are strongly urged to attend.

Instructor(s): C. Rhodes Terms Offered: Autumn, Winter, Spring, Summer

## MOMN 40300. Systems Analysis of Proteins and Post-Translational Modifications. 100 Units.

Proteins play a major role in all cellular processes and their modification represents a major vehicle for expanding the genetic code of the cellular proteome (the inventory of all protein species in a cell). Given the crucial roles in the major cellular pathways and diseases such as cancer, proteins and PTM studies are a critical aspect of most biological projects. This course will cover concepts (including biochemistry, proteomics/systems biology, molecular biology, and bioinformatics), and practical techniques for identifying and quantifying proteins and PTMs. Topics include, but are not limited to quantification of protein interactions, abundances, modifications including phosphorylation, ubiquitination, and lysine acetylation, and subsequent discussion of biochemical and functional roles of proteins and PTMs in regulating biological networks.

Instructor(s): R. Jones, Y. Zhao Terms Offered: Spring

Prerequisite(s): BIOS 20200

Equivalent Course(s): BIOS 21346, CABI 40300, IMMU 40300



### COMMITTEE ON NEUROBIOLOGY

#### Chair

• Christian Hansel

#### Professor

- · Francisco Bezanilla, Biochemistry and Molecular Biology
- · Jean Decety, Psychology
- Harriet de Wit, Psychiatry and Behavioral Neuroscience
- Glyn Dawson, Pediatrics
- Aaron P. Fox, Neurobiology, Pharmacology and Physiology
- Elliot S. Gershon, Psychiatry and Behavioral Neuroscience
- Jay M. Goldberg, Neurobiology, Pharmacology and Physiology
- Christopher Gomez, Neurology
- William Green, Neurobiology
- Elizabeth Grove, Neurobiology
- · Dorothy Hanck, Medicine
- Christian Hansel, Neurobiology
- Richard P. Kraig, Neurology
- Anning Lin, Ben May Department of Cancer Research
- Daniel Margoliash, Organismal Biology and Anatomy
- · Peggy Mason, Neurobiology
- Martha McClintock, Psychology
- Deborah Nelson, Neurobiology, Pharmacology and Physiology
- Eduardo Perozo, Biochemistry and Molecular Biology
- Brian Popko, Neurology
- Nanduri Prabhakar, Medicine
- Raymond P. Roos, Neurology
- Marsha Rosner, Ben May Department of Cancer Research
- Eric A. Schwartz, Neurobiology, Pharmacology and Physiology
- S. Murray Sherman, Neurobiology
- Sangram Sisodia, Neurobiology
- Sara Szuchet, Neurology
- Wei-Jen Tang, Ben May Department of Cancer Research
- · Gopal Thinakaran, Neurobiology
- V. Leo Towle, Neurology
- Paul Vezina, Psychiatry and Behavioral Neuroscience
- Ming Xu, Anesthesia and Critical Care Associate Professor
- James Brorson, Neurology

- Melina Hale, Organismal Biology and Anatomy
- Nicholas Hatsopoulos, Organismal Biology and Anatomy
- Leslie Kay, Psychology
- · Andrea King, Psychiatry and Behavioral Neuroscience
- Philip E. Lloyd, Neurobiology, Pharmacology and Physiology
- · Jeremy Marks, Pediatrics
- Dario Maestriperi, Comparative Human Development
- · James A. Mastrianni, Neurology
- Daniel McGehee, Anesthesia and Critical Care
- Abraham Palmer, Human Genetics
- Brian Prendergast, Psychology
- · Victoria Prince, Organismal Biology and Anatomy
- Clifton Ragsdale, Neurobiology
- Anthony T. Reder, Neurology
- Steven Roth, Anesthesia and Critical Care
- · Betty Soliven, Neurology
- Xiaoxi Zhuang, Neurobiology Assistant Professor
- David Biron, Physics
- Stephanie Dulawa, Psychiatry and Behavioral Neuroscience
- David Freedman, Neurobiology
- Sarah London, Psychology
- Jason MacLean, Neurobiology
- Wei Wei, Neurobiology Emeritus Faculty
- Robert L. Perlman, Pediatrics

The Committee on Neurobiology is an interdepartmental committee designed to provide training and instruction for students interested in the biology of the nervous system, and to encourage communication and the exchange of ideas between faculty members and students interested in neurobiology. Recent technical and conceptual developments in neuroscience have produced remarkable growth in this field. The committee reflects this growth in its structure, having members from different departments whose research interests include a broad spectrum of approaches from the biochemical and molecular to the behavioral and comparative. The committee aims to provide broad training in technical and theoretical aspects of the neurosciences.

#### THE DEGREE OF DOCTOR OF PHILOSOPHY

Students initially are admitted to the Division of the Biological Sciences and must meet divisional requirements. The progress of each student will be supervised during the first one or two years by the chair of the Committee on Neurobiology until the student chooses a thesis advisor. Upon choosing a thesis advisor, an

advisory committee chaired by a faculty member who is not the student's thesis advisor is formed. The advisory committee consists of at least four faculty members with a majority being members of the Committee on Neurobiology. As a student's focus changes, the composition of the advisory committee may be modified.

Each student is required to take at least nine basic science courses. Usually these courses will be taken during the first year and part of the second year. Required courses include a series of courses on cellular, developmental, molecular and systems neurobiology and a course in cell biology. Elective courses focus on topics such as neuropharmacology, systems neurophysiology, development, physiology of ion channels and statistics.

During the first year, in addition to taking courses, students rotate through different laboratories. There is not a required minimum of rotations but students usually rotate through two to four laboratories and pick a research lab by the end of their first year. Toward the end of the second year, students write a preliminary examination consisting of a critical essay, which is followed by an oral defense. Also during the second year, the student writes a thesis proposal in NRSA format and defends this before the advisory committee. For the purposes of the divisional requirements, this is the examination testing the candidate's qualifications for candidacy.

The original observations included in the final Ph.D. dissertation should be judged suitable for publication. The final oral examination for the Ph.D. degree consists of a public seminar and a private defense conducted by the advisory committee and by other such members of the University faculties as may be deemed suitable.

#### NEUROBIOLOGY, COMMITTEE ON COURSES

#### NURB 30107. Behavioral Neuroscience. 100 Units.

This course is concerned with the structure and function of systems of neurons, and how these are related to behavior. Common patterns of organization are described from the anatomical, physiological, and behavioral perspectives of analysis. The comparative approach is emphasized throughout. Laboratories include exposure to instrumentation and electronics, and involve work with live animals. A central goal of the laboratory is to expose students to in vivo extracellular electrophysiology in vertebrate preparations. Laboratories will be attended only on one day a week but may run well beyond the canonical period.

Instructor(s): D. Margoliash Terms Offered: Winter Equivalent Course(s): PSYC 40107, CPNS 30107

#### NURB 30500. Medical Neurobiology. 100 Units.

This intensive course starts by introducing the student to neuroanatomy and neurophysiology. With the vocabulary afforded by that introduction in hand, students will then learn the general principles of perception, followed by focused treatment of vision, hearing and verbal communication, pain, and equilibrium. Students will then learn the key components of voluntary motor control including the motor unit, reflexes, gait, posture, praxis, cerebellar and basal ganglia function, and gaze control. The course wraps up with a consideration of neural contributions to homeostasis and a consideration of how the brain informs the practice of medicine.

The course consists of daily lectures, 9 laboratory exercises, 6 review sessions, a midterm and a final. In addition, the ophthalmology and neurology exams will be taught in collaboration with Clinical Skills.

At the conclusion of this course, students will be prepared for the boards, the neurological part of CPPT, and most importantly for understanding the neural contributions to disorders of all organ systems.

Instructor(s): P. Mason Terms Offered: Autumn

Equivalent Course(s): NEUR 30500

#### NURB 31349. Protein Structure and Functions in Medicine. 100 Units.

This course explores how molecular machinery works in the context of medicine (vision, fight or flight, cancer, and action of drugs). We first explore the physical and biochemical properties of proteins in the context of cellular signaling. We then examine how proteins and other cellular components make up the signal transduction pathway of humans and conduct their biological functions. The course engages students to strengthen their scientific communication and teaching skills via the in-class podcast, oral examinations, computer-aided structural presentations, student lectures, and discussions.

Instructor(s): W-J. Tang Terms Offered: Winter

Prerequisite(s): Completion of a Biological Sciences Fundamentals sequence.

Biochemistry strongly recommended.

Equivalent Course(s): BIOS 21349, CABI 31900

#### NURB 31600. Survey of Systems Neuroscience. 100 Units.

This lab-centered course teaches students the fundamental principles of vertebrate nervous system organization. Students learn the major structures and the basic circuitry of the brain, spinal cord and peripheral nervous system. Somatic, visual, auditory, vestibular and olfactory sensory systems are presented in particular depth. A highlight of this course is that students become practiced at recognizing the nuclear organization and cellular architecture of many regions of brain in rodents, cats and primates.

Instructor(s): C. Hansel, N. Hatsopoulos, staff Terms Offered: Autumn

Prerequisite(s): undergraduates with consent of instructor

Equivalent Course(s): ORGB 32500

#### NURB 31800. Cellular Neurobiology. 100 Units.

This course is concerned with the structure and function of the nervous system at the cellular level. The cellular and subcellular components of neurons and their basic membrane and electrophysiological properties will be described. Cellular and molecular aspects of interactions between neurons will be studied. This will lead to functional analyses of the mechanisms involved in the generation and modulation of behavior in selected model systems.

Instructor(s): P. Lloyd, C. Hansel Terms Offered: Autumn Prerequisite(s): Undergraduates With Consent Of Instructor.

#### NURB 31900. Molecular Mechanisms of Cell Signaling. 100 Units.

Cells in the body communicate with each other by a variety of extracellular signals (e.g., hormones, neurotransmitters) and processes such as vision and olfaction, as well as diseases such as cancer, all involve aspects of such signaling processes. The subject matter of this course considers molecular mechanism of the wide variety of intracellular mechanisms that, when activated, change cell behavior. Both general and specific aspects of intracellular signaling are covered, with an emphasis on the structural basis of cell signaling.

Instructor(s): W.-J. Tang Terms Offered: Spring

Prerequisite(s): "BIOS 20181-20183 or 20191-20193, and 20200"

Equivalent Course(s): BIOS 26317, CPHY 31900

#### NURB 32100. Cell and Molecular Biology of the Neuron. 100 Units.

Cell and molecular biology of the neuron will discuss the fundamental knowledge the students need to understand the inner workings of the neuron. This course will explore core concepts in cell and molecular biology in considerable depth using examples from neurobiology. A wide range of topics will be covered including: from gene to proteins, regulation of gene expression, mammalian cell architecture, neuronal compartmentalization, membrane trafficking, neuronal dysfunction, and genetic models.

Instructor(s): G. Thinakaran Terms Offered: Winter

#### NURB 32200. Molecular Neurobiology. 100 Units.

This course is devoted to the examination of current research in the molecular biology of the nervous system. We will explore the structure and function of macromolecules that control, propagate, and elicit neural signaling. Topics covered include 1) structural elements of neurons and glia; 2) structure and function of the synapse; 3) aspects of the molecular basis of neural signaling; and 4) gene expression in neural systems. Lectures draw on current journal literature to present a state-of-the-art background of the topic, the current questions being explored, as well as problems and aspects.

Instructor(s): W. Green Terms Offered: Alternate Springs

#### NURB 32400. Synaptic Physiology. 100 Units.

This course covers the basic principles of synaptic transmission and plasticity using a combination of lecture and discussion of primary literature. Lecture topics cover membrane electrical phenomena that lead to release of neurotransmitter presynaptically, as well as the physilogical consequences of postsynaptic receptor activation. Paper discussions, which make up ~ 2/3 of the course, are centered on two major topics: 1) The molecular machinery controlling synaptic vesicle exocytosis and recycling, and 2) Synaptic plasticity covering LTP, LTD, Metaplasticity, Spiketiming dependent plasticity and Homeostatic plasticity. There is significant emphasis on the connections between the various forms of synaptic modification and behavior.

Instructor(s): D. McGehee and A. Fox Terms Offered: Spring

#### NURB 32800. Neuropsychopharmacology. 100 Units.

Effects of drugs on behavior; emphasis on the functional contribution of brain neurotransmitter systems.

Instructor(s): P. Vezina Terms Offered: Winter

#### NURB 32900. Perspectives in Drug Abuse. 100 Units.

It is a broad overview course about drug abuse, that is appropriate for graduate students as well as undergraduates. It includes lectures on epidemiology, genetics, neurobiology, experimental methods, policy and treatment, as well as lectures on several specific drug classes. Lectures are by Dr. de Wit and by other invited faculty members, and students are required to present and discuss recent published papers during classes.

Instructor(s): H. de Wit Terms Offered: Spring

#### NURB 33400. Genetic Approaches in Neurobiology. 100 Units.

This course is more technique oriented. The goal is to give a good coverage of different genetic approaches as well as different aspects of neurobiology. Topics are organized by genetic approaches as the following: 1) Transgenic. 2) Gene targeting. 3) Gene replacement. 4) Conditional knockout. 5) Genetic and optical control of neural activity. 6) Transgenic facilitated imaging. 7) Forward genetics and genetic screening. The selection of a variety of papers throughout the course aims to cover different neural pathways, neurotransmitters, receptor/channel types, signaling pathways, and functional implications (learning, memory, addiction, development etc). Specific emphasis will be on the integration of molecular, cellular and systems level approaches in understanding behavior. Lecture time will be devoted to the genetic approaches. Students will present and discuss papers. We will have 2-3 papers each lecture.ches as well as different elements of neuro

Instructor(s): X. Zhuang Terms Offered: Winter

Equivalent Course(s): NEUR 33400

#### NURB 33800. Animal Models of Neuropsychiatric Disorders. 100 Units.

This course will cover the development, validation, and use of animal models of neuropsychiatric disorders. A wide range of animal models will be covered including behavioral, pharmacological, and genetic models, with an emphasis on mouse models. The disorders covered will range from those with unknown etiology to those with known single-gene causes. Disorders covered will include schizophrenia, mood disorders, obsessive-compulsive disorder, and autism spectrum disorders.

Instructor(s): S. Dulawa Terms Offered: Spring

Equivalent Course(s): BIOS 25129

#### NURB 34600. Neurobiology of Disease I. 100 Units.

This seminar course is devoted to understanding pathogenic mechanisms of neuronal death, neurodegenerative disease, and neuronal repair. Weekly seminars are given by experts in the basic and clinical aspects of neurodegenerative diseases. For each lecture, students are provided with a brief description of clinical and pathological features of a given set or mechanistic category of neurodegenerative diseases that is followed by a more detailed description of the current status of knowledge of several of the prototypical pathogenic mechanisms.

Instructor(s): C. Gomez Terms Offered: Winter

#### NURB 34700. Neurobiology of Disease II. 100 Units.

This seminar course is devoted to understanding pathogenic mechanisms of neuronal death, neurodegenerative disease, and neuronal repair. Weekly seminars are given by experts in the basic and clinical aspects of neurodegenerative diseases. For each lecture, students are provided with a brief description of clinical and pathological features of a given set or mechanistic category of neurodegenerative diseases that is followed by a more detailed description of the current status of knowledge of several of the prototypical pathogenic mechanisms.

Instructor(s): C. Gomez, Staff Terms Offered: Spring

Prerequisite(s): BIOS 24246

Equivalent Course(s): BIOS 24247, CPNS 34700

#### NURB 40700. From Structure Coordinates to Protein Function. 100 Units.

The course uses the atomic coordinate of proteins to explore how molecular machinery work in the context of physiological functions (vision, fight or flight) and human diseases (cancer). We begin by exploring protein components that make up the signal transduction pathway and how these components are assembled for the various physiological functions of humans. We then proceed to consider the physical properties of proteins. We conclude by discussing the protein-targeted therapeutics of human diseases. Computer graphic exercises and in-class student presentations complement the lecture topics.

Instructor(s): W.-J. Tang Terms Offered: Winter. L.

Prerequisite(s): Completion of a Biological Sciences Fundamentals sequence and

BIOS 20200. Recommended for AP5 students. Equivalent Course(s): BIOS 21339, CABI 40700



# DEPARTMENT OF ORGANISMAL BIOLOGY AND ANATOMY

#### Chair

· Robert K. Ho

#### Professors

- Michael I. Coates
- · Martin Feder
- Edwin L. Ferguson, Molecular Genetics & Cell Biology
- Nicholas G. Hatsopoulos
- Robert K. Ho
- · David Jablonski, Geophysical Sciences
- Michael LaBarbera
- Raphael Lee, Surgery
- Zhe-Xi Luo
- Daniel Margoliash
- Victoria E. Prince
- Callum Ross
- · Paul Sereno
- Neil H. Shubin

#### **Associate Professors**

- Melina E. Hale
- Clifton Ragsdale, Neurobiology
- Ilya Ruvinsky, Ecology and Evolution
- Urs Schmidt-Ott

#### **Assistant Professors**

- Sliman Bensmaia
- · Leslie Osborne, Neurobiology
- Stephanie Palmer

#### Lecturers

- James O'Reilly
- Mark Westneat, Field Museum of Natural History Emeritus Faculty
- James A. Hopson
- · R. Eric Lombard

The graduate program in Integrative Biology is housed in the Department of Organismal Biology and Anatomy (OBA), which has a long history of training students in integrative organismal biology. During the 1970s, the focus of the (then) Department of Anatomy shifted from the classic purview of anatomy departments

in the middle of the 20th century — histology, neurobiology, and cell biology to more comparative and functionally oriented topics and an explicit focus on vertebrate evolutionary biology and functional morphology. The neurobiology section of the department expanded first into explicitly comparative areas and later into neuroethology. Over the next twenty years the department evolved into its present configuration with research and teaching foci which include biomechanics/ functional morphology, organismal neurobiology, evolutionary developmental biology, and vertebrate evolutionary biology, all unified by a shared reference point in the biological hierarchy — the organism — an entity we see as the natural reference for all of the biological sciences since it is the natural unit of selection. We see the intellectual areas presently housed in OBA as inextricably and naturally connected. To understand the organismal level in biology requires an understanding of both how organisms have been shaped over evolutionary time scales and how they are generated on developmental time scales, the various interacting tissue and organ systems that generate organismal functions, and the mutual feedback among these functional, evolutionary, and developmental processes. The high degree of connectivity among our core disciplines is exemplified by the integrative nature of student dissertation projects in OBA and by the high level of interaction and collaboration among our faculty; both faculty and graduate student research in OBA frequently span several of these areas. In recent years there has been a resurgence of interest in and appreciation for organismal-level biology on the national level, putting molecular, genetic, and computational tools and information to use to understand broader systems-level questions. OBA and its Integrative Biology program has been actively positioning itself as a leader in research and graduate training in this endeavor.

Research and training in the graduate program focus on the integration of four overlapping areas:

- 1. Biomechanics: the application of methods from engineering and physics to understanding the design of organisms.
- 2. Developmental Biology: understanding how information coded into the genome is translated into the patterns seen in organisms. Our developmental biology program has a special emphasis on the interface between evolution and development, an area sometimes called "EvoDevo".
- 3. Neurobiology: understanding how the nervous system regulates and controls the behavior of animals. Our neurobiology program has a special emphasis on the relationship of the nervous system to behavior (or neuroethology) and the application of quantitative methods to understanding neural function (computational neuroscience).
- 4. Paleontology: documenting and understanding evolutionary patterns and processes through analyses of the fossil record.

Training in the department places an emphasis on familiarity with a broad range of ideas and skills in organismal biology. Although students can conduct research in any of the areas represented in the department, they are encouraged to develop research programs that capitalize on the talents of two or more faculty members with different perspectives. The department also encourages students to interact

with other units on campus (such as the Department of Ecology and Evolution and the Committees on Development, Regeneration and Stem Cell Biology; Evolutionary Biology; Genetics, Genomics and Systems Biology; and Neurobiology) as well as the Field Museum of Natural History, the Brookfield and Lincoln Park zoos and the Shedd Aquarium. Students earning doctorates through the department will be qualified, following suitable postdoctoral training, for research and teaching careers in biology departments, anatomy departments and museums.

#### DEGREES

#### MASTER OF SCIENCE

Students are not admitted to the program for the sole purpose of obtaining a Master of Science degree, but this degree is awarded to students from other academic units who require a Master of Science degree as one requirement for the doctorate.

#### DOCTOR OF PHILOSOPHY

The requirements for the Doctor of Philosophy are as follows:

- Course requirements are individualized and are defined for students early in their stay in the program, based on the student's background and interests.
   Students will complete a course distribution requirement by the end of their second year. Students must fulfill the divisional requirement of serving as a teaching assistant in two courses and completing ethics training.
- The preliminary examination, consisting of a written segment which covers
  a range of topics in organismal biology, as well as both the oral and written
  presentation of a directed research project or dissertation research proposal.
- The completion of a research project and the presentation of a dissertation satisfactory to the department faculty.
- The passing of a final oral examination.

#### ADMISSION

We strongly advise students considering application to the department to begin preparation of their application early in the autumn quarter, so that all materials will arrive by the December 1 deadline. The department requires GRE General Test scores from all applicants, and strongly recommends submission of GRE subject test scores in biology. Foreign applicants whose first language is not English also must submit TOEFL test scores with their application materials. Further information also may be obtained from the department's home page at http://pondside.uchicago.edu/oba.

#### **COURSES**

Didactic and seminar courses are offered in each of the departmental research foci. The specific courses presented vary from year to year. A list of current courses can be obtained by contacting the Graduate Program Administrator. Students are encouraged to take courses related to their interests in other academic units on campus.

# ORGANISMAL BIOLOGY & ANATOMY COURSES

## ORGB 30001. The Human Body. 125 Units.

The Human Body course is the first component of the Scientific Foundations of Medicine curriculum in Year 1. The Human Body course will provide you with a foundation in the structural organization of the body. You will learn gross anatomy of the back, thorax, abdomen, pelvis, head and neck, and upper and lower limbs through large and small group teaching sessions, as well as cadaver dissection. Correlations with Radiology and Surgery are an integral part of the course and provide real world clinical context for the anatomic material.

Instructor(s): C. Ross Terms Offered: Summer

Note(s): For Pritzker students only, unless by instructor consent

# ORGB 31300. Key Issues in Early Vertebrate Evolution. 100 Units.

The course addresses questions about the origin of vertebrates, the interrelationships of major gnathostome clades, and the fish-tetrapod transition. Instructor(s): M. I. Coates Terms Offered: Winter

Prerequisite(s): Undergraduate level chordate biology required; familiarity with methods in systematic biology advantageous.

Equivalent Course(s): EVOL 30300

# ORGB 31900. IGERT Bootcamp: Motor Control/Movement. 100 Units.

Outreach training with Project Exploration and specialized research opportunities in IGERT laboratories

Instructor(s): M. Hale Terms Offered: Autumn

Note(s): Required for IGERT trainees. Others may register with consent of instructor.

# ORGB 32000. Development & Evolution of Neuromechanical Systems. 100 Units.

We investigate neuromechanical systems from developmental and evolutionary perspectives, synthesizing recent research in the field.

Instructor(s): M. Hale, C. Ross Terms Offered: Spring Note(s): This course is required of all IGERT trainees.

#### ORGB 32100. IGERT: Research with the Encyclopedia of Life. 100 Units.

Instructor(s): M. Westneat Terms Offered: Spring Note(s): This course is required of all IGERT trainees.

# ORGB 32500. Survey of Systems Neuroscience. 100 Units.

This lab-centered course teaches students the fundamental principles of vertebrate nervous system organization. Students learn the major structures and the basic circuitry of the brain, spinal cord and peripheral nervous system. Somatic, visual, auditory, vestibular and olfactory sensory systems are presented in particular depth. A highlight of this course is that students become practiced at recognizing the nuclear organization and cellular architecture of many regions of brain in rodents, cats and primates.

Instructor(s): C. Hansel, N. Hatsopoulos, staff Terms Offered: Autumn

Prerequisite(s): undergraduates with consent of instructor

Equivalent Course(s): NURB 31600

# ORGB 33750. Chordates: Evolution and Comparative Anatomy. 100 Units.

Chordate biology emphasizes the diversity and evolution of modern vertebrate life, drawing on a range of sources (from comparative anatomy and embryology to paleontology, biomechanics, and developmental genetics). Much of the work is lab-based, with ample opportunity to gain firsthand experience of the repeated themes of vertebrate body plans, as well as some of the extraordinary specializations manifest in living forms. The instructors, who are both actively engaged in vertebrate-centered research, take this course beyond the boundaries of standard textbook content.

Instructor(s): M. Coates Terms Offered: Spring

Prerequisite(s): Biological Sciences Fundamentals sequence. Recommended for AP5 students.

Equivalent Course(s): BIOS 22250, EVOL 30250

## ORGB 33850. Evolution and Development. 100 Units.

The course will provide a developmental perspective on animal body plans in phylogenetic context. The course will start with a few lectures, accompanied by reading assignments. Students will be required to present a selected research topic that fits the broader goal of the course and will be asked to submit a referenced written version of it after their oral presentation. Grading will be based on their presentation (oral and written) as well as their contributions to class discussions.

Instructor(s): U. Schmidt-Ott Terms Offered: Autumn

Prerequisite(s): Advanded undergraduates may enroll with the consent of the instructor.

Equivalent Course(s): EVOL 33850, DVBI 33850, BIOS 22306

#### ORGB 34200. Biological Fluid Mechanics. 100 Units.

Prior physics course required; prior chemistry and calculus courses recommended. This course introduces fluid mechanics and the interactions between biology and the physics of fluid flow (both air and water). Topics range from the fluid mechanics of blood flow to the physics (and biology) of flight in birds and insects.

Instructor(s): M. LaBarbera. L. Terms Offered: Winter

Prerequisite(s): Completion of the general education requirement for the biological sciences

Equivalent Course(s): BIOS 22242, EVOL 34200

# ORGB 34300. Biomechanics of Organisms. 100 Units.

Prior chemistry, physics, and calculus courses recommended. This course examines how organisms cope with their physical environment, covering the properties of biological materials, mechanical analysis of morphology, and principles of design optimization. We emphasize support systems of organisms but also examine aspects of cardiovascular design. Mechanical properties of biomaterials are analyzed in relation to their underlying biochemical organization and biophysical properties, with mathematical treatment at an introductory level. The lab research project is optional.

Instructor(s): M. LaBarbera. L. Terms Offered: Winter 2013

Prerequisite(s): Completion of the general education requirement in the biological sciences

Equivalent Course(s): BIOS 22243, EVOL 34300

# ORGB 34650. Computational Approaches for Cognitive Neuroscience. 100 Units.

This course is concerned with the relationship of the nervous system to higher order behaviors such as perception and encoding, action, attention, and learning and memory. Modern methods of imaging neural activity are introduced, and information theoretic methods for studying neural coding in individual neurons and populations of neurons are discussed.

Instructor(s): N. Hatsopoulos Terms Offered: Spring

Prerequisite(s): BIOS 24222 or CPNS 33100 Equivalent Course(s): PSYC 34410,CPNS 33200

# ORGB 34800. Evolutionary Biomechanics of Vertebrate Feeding Systems. 100 Units.

This proseminar examines the evolutionary and functional principles underlying the diversity of vertebrate musculoskeletal systems as revealed by research on vertebrate feeding systems. Mechanical, neuromechanical, modeling and experimental approaches to the biomechanics of vertebrate feeding systems are examined. Weekly labs cover practical skills surrounding collection and analysis of in vivo data. Students are required to participate in class discussions and prepare a written and oral proposal of a research project on a vertebrate feeding system. It is expected that the students will then perform that research in the Summer Quarter. Instructor(s): C. Ross Terms Offered: Winter

Prerequisite(s): Vertebrate diversity and phylogenetic relationships; algebra, some linear algebra and calculus helpful.

#### ORGB 40000. Introduction to Integrative Organismal Biology. 100 Units.

A graduate seminar to introduce students to research of faculty in the Department of Organismal Biology and Anatomy.

Instructor(s): M. Hale Terms Offered: Autumn

Note(s): Required for first and second year graduate students in Integrative Biology.

# ORGB 40001. Topics: Integrative Organismal Biology. 100 Units.

Instructor(s): M. LaBarbera Terms Offered: Winter

Note(s): Required for first and second year graduate students in Integrative Biology.

### ORGB 40100. Grants, Publications and Professional Issues. 100 Units.

Covers professional topics in evolutionary biology, primarily strategies in grant writing and review. Each student will work towards the submission of an application of their choice. The course meets weekly and involves extensive writing and discussion.

Instructor(s): J. Bergelson, R. Ho, M. Coates Terms Offered: Autumn Note(s): Only open to first year graduate students in the Darwinian Sciences Cluster Equivalent Course(s): EVOL 40100, ECEV 40100

# ORGB 57500. Cell Growth, Injury, Repair and Death. 100 Units.

This course reviews the various modes of cell injury that can occur, the basic molecular healing responses, and pathways of metabolic survival or death. This course may be of interest to those interested in wound healing, biological stress responses, molecular chaperones, radiobiology, biomechanics, biomedical engineering, as well as trauma and critical care medicine.

Instructor(s): R. Lee Terms Offered: Autumn Equivalent Course(s): MOLM 57500,MPMM 57500



# DEPARTMENT OF PATHOLOGY

#### Chair

• Vinay Kumar

#### **Professors**

- Albert Bendelac, Pathology
- Richard DeMay, Pathology
- · Yang Xin Fu, Pathology
- · Thomas Gajewski, Pathology and Medicine
- John Hart, Pathology
- · Aliya Husain, Pathology
- Thomas N. Krausz, Pathology
- · Mark Lingen, Pathology
- Shane Meehan, Pathology
- Stephen Meredith, Pathology
- Jonathon Miller, Pathology
- Anthony G. Montag, Pathology and Surgery
- Cathryn Nagler, Pathology
- · José Quintans, Pathology
- Hans Schreiber, Pathology
- · Lucia Schuger, Pathology
- · Jerome Taxy, Pathology
- Jerrold Turner, Pathology
- James Vardiman, Pathology
- Martin Weigert, Pathology
- Robert Wollmann, Pathology and Neurology
- Shu-Yuan Xiao, Pathology
- K-T Jerry Yeo, Pathology

## **Associate Professors**

- John Anastasi, Pathology
- Beverly Baron, Pathology
- · Anthony Chang, Pathology
- · Alexander Chervonsky, Pathology
- Barbara Kee, Pathology
- Susana Marino, Pathology
- Ivan Moskowitz, Pathology
- Ting-Wa Wong, Pathology Assistant Professors
- Tatjana Antic, Pathology

- Nikolina Babic, Pathology
- Carrie A. Fitzpatrick, Pathology
- Sandeep Gurbuxani, Pathology
- · Katja Gwin, Pathology
- · Seungmin Hwang, Pathology
- · Loren Joseph, Pathology
- David McClintock, Pathology
- Jeffrey Mueller, Pathology
- Gladell Paner, Pathology
- Peter Pytel, Pathology
- · Husain Sattar, Pathology
- Peter Savage, Pathology
- Vera Tesic, Pathology
- · Angela Treml, Pathology
- Christopher Weber, Pathology Emeritus Faculty
- Cyril Abrahams, Pathology
- Frank W. Fitch, Pathology
- Godfrey Getz, Pathology
- Martin Gross, Pathology
- · Josephine Morello, Pathology
- Hyman Rochman, Pathology
- Benjamin H. Spargo, Pathology
- Francis H. Straus II, Pathology
- Kenneth Thompson, Pathology Instructors
- Megan McNerney, Pathology Research Associate (Professor)
- Catherine Reardon, Pathology Clinical Associates
- Ward Reeves, Pathology
- Elizabeth Sengupta, Pathology

The Department of Pathology previously joined with the Committee on Molecular Medicine to offer a joint program, Molecular Pathogenesis and Molecular Medicine. The Graduate Program in Molecular Pathogenesis and Molecular Medicine offers a program of study leading to the Doctor of Philosophy degree in Pathology. Fields of particular emphasis include immunobiology, vascular biology, and atherosclerosis, neurodegenerative disease, gastrointestinal epithelial biology, molecular oncology, and respiratory biology.

Instruction includes courses in biochemistry, defense reactions, cellular and molecular pathology, cell, molecular and genetic biology, cancer biology and immunology that are generally completed within the first two years of study. Each student must select a faculty sponsor who is willing to supervise his or her thesis research. Such faculty members are generally in the Department of Pathology but may be chosen from other departments in the Division of the Biological Sciences if the research program is considered suitable by the departmental graduate student advisory committee.

The Department of Pathology's graduate program is integrated within the Biomedical Sciences Cluster, which also includes graduate programs from the Committee on Cancer Biology, the Committee on Immunology, the Committee on Microbiology, and the Committee on Molecular Metabolism and Nutrition. The five academic units share several common courses and additional common events for students and faculty within the cluster. The goal of the cluster system is to encourage interdisciplinary interactions among both trainees and faculty, and to allow students flexibility in designing their particular course of study.

# **ADMISSION**

Students interested in obtaining the Ph.D. in Molecular Pathogenesis and Molecular Medicine should submit an application to the Biological Sciences Division by December 1st of each year; indicate their cluster of interest as Biomedical Sciences and select as Molecular Pathogenesis and Molecular Medicine as their proposed degree program.

# THE DEGREE OF DOCTOR OF PHILOSOPHY

Ph.D. requirements include:

- 1. Completion of 9.5 course credits consisting of basic science, pathology and elective courses
- 2. Two laboratory rotations
- 3. A preliminary exam in the form of a mock NIH-style grant proposal
- 4. A thesis proposal
- 5. A final thesis defense

### PATHOLOGY COURSES

# MPMM 30600. Signal Transduction and Disease. 100 Units.

Topics include receptor ligands, membrane receptor tyrosine kinases and phosphatases, G proteins, proto-oncogenes, signaling pathways, cytoplasmic protein kinases and phosphatases, transcription factors, receptor-nucleus signaling, development and cancer, genetic dissection of signaling pathways, cell growth and cell proliferation, interplay of cell cycle regulators, cell cycle progression and apoptosis, and sensing of hypoxia and mechanical stimuli. The role of signaling in disease is a theme throughout the course.

Instructor(s): N. Dulin Terms Offered: Winter

Equivalent Course(s): CCTS 40300

### MPMM 30800. Molecular Defense Mechanisms. 100 Units.

Defense mechanisms which include the mechanisms of inflammation, coagulation, immunological injury, cytokines, complement induced injury, hypersensitivity, autoimmunity and AIDS. Emphasis is on mechanisms at the molecular level with an introductory lecture and following with discussions of selected recent journal articles which are read and discussed at class sessions.

Instructor(s): S. Meredith Terms Offered: Spring

# MPMM 39000. Major Human Disease Journal Club. 050 Units.

All Pathology Program graduate students must participate in the Biodisease Journal Club throughout their training. Credit will be given during the student's first and second years, however it is expected that students will continue to attend and participate in their later years.

Instructor(s): C. Reardon, G. Getz Terms Offered: Autumn, Winter, Spring Note(s): Open to all BSD & PSD Students

# MPMM 57500. Cell Growth, Injury, Repair and Death. 100 Units.

This course reviews the various modes of cell injury that can occur, the basic molecular healing responses, and pathways of metabolic survival or death. This course may be of interest to those interested in wound healing, biological stress responses, molecular chaperones, radiobiology, biomechanics, biomedical engineering, as well as trauma and critical care medicine.

Instructor(s): R. Lee Terms Offered: Autumn Equivalent Course(s): MOLM 57500,ORGB 57500

# PATH 30010. Immunopathology. 100 Units.

Five examples of diseases are selected each year among the following categories: autoimmune diseases, inflammatory bowel diseases, infection immunity, immunodeficiencies and gene therapy, and transplantation and tumor immunology. Each disease is studied in depth with general lectures that include, where applicable, histological analysis of diseased tissue samples and discussions of primary research papers on experimental disease models. Special emphasis is placed on understanding immunopathology within the framework of general immunological concepts and on experimental approaches to the study of immunopathological models.

Instructor(s): B. Jabri Terms Offered: Winter Prerequisite(s): Consent of instructor

Equivalent Course(s): BIOS 25258,IMMU 30010



# Translational Medicine

# HOWARD HUGHES MEDICAL INSTITUTE MED-INTO-GRAD TRANSLATIONAL TRAINING PROGRAM (TTP)

The Howard Hughes Medical Institute - University of Chicago PhD/MS Translational Training Program (TTP) is designed to engage students in both basic biological and clinical research, and to bridge the gap between highly specialized research and human disease processes in the context of a formal PhD program. Graduates will receive a PhD in their chosen discipline and an MS in Translational Research.

In additional to gaining strong understanding in modern research methodology, trainees will simultaneously be trained in pathophysiology and exposed to clinical problems that present them with opportunities to establish credentials as a biomedical researcher.

First-year doctoral students in the Biomedical Sciences cluster, which includes the Committees on Cancer Biology, Immunology, Microbiology, Molecular Metabolism and Nutrition, and the Department of Pathology, Molecular Pathogenesis and Molecular Medicine program, are eligible to apply. These five academic units share several common courses, seminar series, retreats and additional common events.

Students in the Neuroscience cluster, specifically the Committees on Neurobiology and Computational Neuroscience, are also welcome to apply. Neurobiology is an interdepartmental program designed to provide training and instruction for students interested in the biology of the nervous system, while computational neuroscience is concerned with how components of the various nervous systems interact to produce behaviors.

The Translational Training Program courses (several that were designed specifically for this program), lectures and workshops offer exposure to a wide array of clinical situations which would not be experienced in a regular basic science program. In addition, the requirement of having a thesis supervisor with a clinical background assures a medical focus in the research project.

Participants are also required to develop thesis projects focused on human biology or disease processes, and remain intellectually engaged with translational research topics through various conferences, seminars and the CTSA Translational Research and Outcomes Research workshops. Each trainee will have two mentors; one from their primary department and one with a clinical background.

Program participants receive a supplement to the current stipend levels, as well as funds toward laboratory expenses (core facilities charges, statistical analysis, etc.), consumables and conference attendance.



# CLINICAL DEPARTMENTS IN THE BIOLOGICAL SCIENCES

Faculty in the Division of the Biological Sciences participate in undergraduate and graduate medical education through the Pritzker School of Medicine, and maintain a vital clinical enterprise through the University of Chicago Medical Center. Twelve clinical departments offer a wide variety of educational and research opportunities to students and treatment options to patients. In addition, one of these departments, described in the section on the Basic Biological Sciences, offers graduate programs leading to the PhD degree: Radiology (Medical Physics). Brief descriptions of each of the clinical departments appear below. Additional details about our clinical departments can be found by visiting the Biological Sciences Division and Pritzker School of Medicine websites: http://www.bsd.uchicago.edu/and http://pritzker.uchicago.edu/

# DEPARTMENT OF ANESTHESIA AND CRITICAL CARE

The Department of Anesthesia and Critical Care offers clinical training and educational and research opportunities for qualified students at all levels. While one mission of the department is to provide high quality clinical anesthesia (including pain therapy, intensive care, and perioperative management), the Department of Anesthesia and Critical Care also maintains active research programs in neurobiology, echocardiography, patient safety, psychomotor pharmacology, clinical pharmacology (including herbal medications in conjunction with the TANG Center), and outcomes research. Educational opportunities for students occur at the undergraduate level, in graduate courses that are led by our faculty, during the course of the medical school curriculum, and at the post graduate level. We also provide pre doctoral and post doctoral positions in our laboratories and provide post residency clinical training in critical care, pain management, cardiothoracic anesthesia and pediatric anesthesia. Individuals seeking opportunities for research or study within the department are invited to call the Chairman of the Department of Anesthesia and Critical Care, Pritzker School of Medicine, 5841 South Maryland Avenue, MC 4028, Chicago, IL 60637, telephone: (773) 702-2545.

# Department of Family Medicine

The Department of Family Medicine was established by Bernard Ewigman, MD MSPH, who was recruited as the Founding Chairman in 2002. Since that time, the Department has grown to include many clinical practices, over 70 faculty members, medical student education, a residency program, fellowship programs, and a practice based research network. The Department is based primarily at the University of Chicago, the NorthShore University Health System and in the communities served both on the south and north sides of the Chicagoland area. The Department is unique in its focus on community based practice, education in community based settings, and research and scholarship relevant to

improving primary care in both urban and suburban practice and the health of the communities we serve.

# DEPARTMENT OF MEDICINE

The Department of Medicine is comprised of nearly 300 full-time faculty members who provide clinical, translational, and basic research training for individuals at all levels, including College, undergraduate medical, graduate medical, and post-doctoral trainees. Because of the diverse interests of the faculty, the department is organized into sub-specialty sections with each represented by nationally recognized leaders in their field. The sections include cardiology, dermatology, endocrinology, emergency medicine, gastroenterology, geriatrics, general internal medicine, genetic medicine, hospital medicine, nephrology, infectious disease, hematology/oncology, pulmonary/critical care medicine and rheumatology.

The Department of Medicine has a long tradition of conducting original and rigorous biomedical and clinical research of fundamental significance in addition to providing a full range of outpatient, inpatient, and consultative services. Trainees can work with departmental faculty through participation in degree granting programs in the Pritzker School of Medicine or graduate programs, post-graduate residency and fellowship programs, or other specialty research programs.

Further information can be obtained from the appropriate degree granting entity or post-graduate training program. General questions can be directed to the Vice Chairs for Research: Dr. Julian Solway, Dr. Ravi Salgia or Dr. Bana Jabri.

# DEPARTMENT OF NEUROLOGY

The Department of Neurology offers clinical training and research opportunities in the study of the nervous system and in neurological disorders. The department has a number of educational programs directed towards medical students, graduate students, residents and post residency fellows. These programs offer instruction in basic and translational research and in clinical neurology as well as the subspecialties of neurology that include pediatric neurology, neuroimmunology, neurovirology, clinical neurophysiology and sleep disorders, stroke, movement disorders and cognitive disorders. The department does not admit students nor offer a degree program. Nevertheless, opportunities are available for students who have been admitted to a Ph.D. program to pursue research under the direction of several of the department's faculty who direct laboratory research programs in basic neuroscience and/or neurological disease research. Post doctoral and post residency positions are also available. Candidates for graduate and post graduate study are invited to visit the faculty and explore opportunities for research. Please contact the department at (773) 702-6390.

# DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

The Department of Obstetrics and Gynecology is located in the Chicago Lyingin Hospital in Hyde Park, which is an integral part of the University of Chicago Medical Center complex. The department is dedicated to the health care of women and has an outpatient clinic adjacent to the hospital. The faculty care for women with high risk pregnancies, gynecologic malignancies, those requiring complex gynecologic and pelvic reconstructive surgery as well as minimal invasive surgery, reproductive health and complex contraception, and problems of reproductive endocrinology & infertility, including assisted reproductive technologies.

The educational activities of the department are multi-faceted and include medical students, residents and fellows under the supervision of the faculty. We have recently established an affiliation with an excellent community-based academic institution in Evanston, NorthShore University Health System. This led to a major expansion of our clinical and research activities which are carried out within the department at both sites and encompass basic translational laboratory investigation, clinical trials and population-based epidemiology. We encourage students, interns, and residents to participate in these scientific endeavors and a large number pursue careers in academic medicine.

Our Departmental activities take place in the outpatient setting, the labor and delivery suite, the operating rooms, the inpatient wards, and in our laboratories. Research opportunities are available in all the subspecialty areas as well as genetics. Subspecialty fellowships are also available in Family Planning, Maternal-Fetal Medicine and Urogynecology and Pelvic Reconstructive Surgery. For more information, please call (773) 702-6726.

# DEPARTMENT OF PATHOLOGY

Please see the listing under Basic Biological Sciences.

# DEPARTMENT OF PEDIATRICS

The Department of Pediatrics offers instruction and research in normal and abnormal growth and development of infants and children and in the prevention, diagnosis and treatment of illness in children. All educational activities are integrated with research and scholarly endeavors to advance knowledge in the field of child healthcare. The Department of Pediatrics has clinical and research facilities at the University of Chicago Children's Hospital; at La Rabida Children's Hospital and Research Center (children's chronic diseases); at the University of Chicago Friend Family Health Center at 55th and Cottage Grove Avenue; and at ambulatory clinical facilities at pediatric offices located in the southern suburbs and northwest Indiana.

Comprising over 100 faculty and research associates, the department conducts extensive research programs in a wide range of disciplines related to child health, growth, development and public policy. Research is conducted at all of the sites mentioned above. Postdoctoral fellows, both M.D.s and Ph.D.s, as well as undergraduate medical students conduct research and receive research education guided by departmental faculty.

Candidates for graduate and post graduate study are invited to visit with the various faculty to explore a wide range of opportunities. Contact the office of the department chair at the University of Chicago Children's Hospital, University of Chicago, 5841 South Maryland Avenue, Chicago, IL 60637, or call (773) 702-6205.

# Department of Psychiatry and Behavioral Neuroscience

Full time faculty in the Department of Psychiatry and Behavioral Neuroscience teach and deliver inpatient, outpatient, and consultation services in mood disorders, anxiety disorders, personality disorders, eating disorders, addictive disorders, electroconvulsive therapy, and schizophrenia. Primary and affiliated teaching and clinical institutions besides the University of Chicago Medical Center include Mercy Hospital, Evanston Hospital, and Chicago Lakeshore Hospital. Assessments include psychiatric diagnostic evaluation, psychological testing, neuropsychological testing, and other structured evaluations. Interventions may include a broad range of individual, family, and group therapies, including cognitive behavioral, psychodynamic, and psychopharmacologic treatments. Specialties in the Child and Adolescent Section include attention deficit hyperactivity disorder, disruptive behavior disorders, developmental disorders, and behavioral and learning difficulties. Major research efforts across the Department are in molecular pharmacology, behavioral psychopharmacology, behavioral and molecular genetics, affective neuroscience and neuroimaging, and psychopharmacology.

The department does not offer any degrees, but elective opportunities are available for degree candidates from other programs. Major educational opportunities for medical students, graduate students, interns, residents, fellows, other physicians and clinical psychologists are linked to through http://psychiatry.bsd.uchicago.edu/.

For more information, please contact the Psychiatry Office of Education at (773) 702-0529 or the Chair of Psychiatry at (773) 834-4083, further contact information available at http://psychiatry.bsd.uchicago.edu/.

# DEPARTMENT OF RADIATION AND CELLULAR ONCOLOGY

The Department of Radiation and Cellular Oncology currently provides clinical radiation oncology services at four practice locations: the University of Chicago's Center for Advanced Medicine (DCAM), the Outpatient Care Center (OCC) at the University of Illinois at Chicago, the University of Chicago Comprehensive Cancer Center at Silver Cross, and at Sherman Hospital. Approximately 1900 patients per year are treated at these facilities. State of the art clinical facilities include 8 imageguided linear accelerator treatment systems, stereotactic radiosurgery/stereotactic body radiotherapy, high dose-rate brachytherapy, and multislice wide-bore CT scanners.

The department conducts basic and translational research in cancer biology, radiation treatment physics and radiation biology. The department stresses a basic science approach to radiation oncology and state of the art investigation of molecular aspects of cancer through joint research programs with faculty members in the Division of the Biological Sciences. In addition a broad spectrum of clinical research is supported, including internal and multi-institutional treatment protocols and outcomes analysis.

The Department of Radiation and Cellular Oncology, in conjunction with the Department of Radiology, offers programs leading to the Ph.D. degree in medical physics. For more information, refer to the Committee in Medical Physics listing.

# DEPARTMENT OF RADIOLOGY

Please see the Graduate Program in Medical Physics listing under Basic Biological Sciences.

# DEPARTMENT OF SURGERY

The Department of Surgery has a very active research program spanning the basic, translational, and clinical sciences. While traditionally surgery has focused on the excision of diseased tissues and repair of injury, it is now equally concerned with specific interventions that facilitate tissue regeneration, supplement the body through the transplantation of organs and the implantation of synthetic materials and tissues developed in vitro, and target particular diseased cells or modulate the behavior of normal cells.

Research in the Department of Surgery is organized into several focus areas including transplantation immunology and inflammation, carcinogenesis and metastasis, tissue regeneration and engineering, and cardiothoracic and vascular research. Each of these areas encompasses multiple clinical specialties within the department.

Specific current research programs include studies of the immune response to synthetic materials, mechanisms of immune tolerance in transplantation, crosstalk between the intestinal microbiome and the intestinal epithelium, molecular therapeutic strategies in brain cancer, tumorigenesis and metastasis in prostate and ovarian cancer, and signaling mechanisms in heart failure.

Faculty members of the Department of Surgery teach in a number of courses in the College and are members of a variety of graduate programs in the Biological Sciences Division. They are also extensively involved in the Medical Scientist Training Program (M.D.-Ph.D). Undergraduate, graduate and medical students interested in participating in research within the department should contact individual investigators or Karl S. Matlin, Ph.D. (http://surgicalresearch.bsd.uchicago.edu/faculty/matlin), Vice-Chairman of Research.



# THE PRITZKER SCHOOL OF MEDICINE

# MISSION

At the University of Chicago, in an atmosphere of interdisciplinary scholarship and discovery, the Pritzker School of Medicine is dedicated to inspiring diverse students of exceptional promise to become leaders and innovators in science and medicine for the betterment of humanity.

# **OVERVIEW**

The University of Chicago matriculated its first class of medical students in 1927 and today is a national leader in training physicians and physician-scientists. In recognition of the generous support extended to the medical school from the Pritzker family of Chicago, the medical school was renamed the Pritzker School of Medicine in 1968. The great traditions which underlie the school's history include the presence of a full-time teaching faculty devoted to working with students, a strong emphasis on research and discovery, and a commitment to translating the most recent advances in biomedical science to the bedside.

The Pritzker School of Medicine is unique among medical schools in that it is a part of the academic Division of the Biological Sciences. This situation offers medical students a wide array of opportunities for interdisciplinary research, learning and collaboration between the basic and clinical sciences. Surveys conducted by the Association of American Medical Colleges over the last several years consistently show the University of Chicago among the top schools in the nation as a producer of faculty members at academic medical centers.

In 2009, the Pritzker School of Medicine began rolling out a reorganized curriculum, known as the Pritzker Initiative. The new curriculum emphasizes active learning, integration among the clinical and basic sciences, and scholarship and discovery. The Pritzker curriculum begins with the introduction to the Human Body, which runs from early August through October and includes lectures from nearly 30 University of Chicago faculty members. Beginning in late September, first years students are introduced to the Scientific Foundation of Medicine series. This series spans the first two years of study guiding students through such themes as Response to Injury, Neurobiology, and Clinical Pathophysiology and Therapeutics. Students also begin seeing patients during their first quarter as part of the longitudinal Physician-Patient-Society-Systems (P2S2) course. This course includes modules on Health Care Disparities and the Social Context of Medicine. Students have access to a state-of-the-art clinical performance center which uses standardized patients and videotaped performance to educate students in taking a history, performing a physical examination, and clinical decision making. By the time students enter their clerkship rotations during the end of their second year of studies they are considered part of the health care team. During their clinical years, students participate in eight clinical clerkships, a subinternship and a series of elective experiences at the nationally ranked University of Chicago Medical Center and NorthShore University HealthSystem.

Building on Pritzker's legacy of producing research scholars, the revamped curriculum also includes a Scholarship and Discovery thread which requires the completion of a mentored scholarly project. Students have the option to engage in scholarship in medical education, quality improvement, community health, and global health. During the pre-clinical years, students acquire core skills in research methodology and biostatistics and return to their designated scholarly area during their fourth year. The Pritzker School of Medicine's curriculum culminates with the Transitions to Internship Capstone course which provides graduating fourth year students with the practical skills they need to transition seamlessly into graduate medical education.

# THE UNIVERSITY OF CHICAGO MEDICAL CENTER

The University of Chicago Medical Center, which includes the new \$700 million Center for Care and Discovery, plus Comer Children's Hospital, Bernard A. Mitchell Hospital and the Duchhossois Center for Advanced Medicine, serves as the teaching facility for the Pritzker School of Medicine.

The medical center is a leader in research and treatment of disorders such as cancer, gastrointestinal disease, diabetes, lung disease, heart disease, neurological disorders, musculoskeletal disorders and others. It houses more than 100 specialty clinics and provides medical care to more than 300,000 patients a year.

The Medical Center and Biological Sciences Division encompass almost 5 million gross square feet of space in more than 30 buildings devoted to research, teaching and patient care.

In early 2013, the 10-story Center for Care and Discovery opened, adding 1.2 million square feet of patient and clinical space. The state-of-the-art facility, designed by renowned architect Rafael Vinoly, is nestled in the heart of the medical campus, steps away from the 10-story Knapp Center for Biomedical Discovery, which opened in 2009, the Gordon Center for Integrative Science and Pritzker School of Medicine. Its prime location emphasizes our commitment to integrating research, education, and clinical excellence to improve patient care.

The Medical Center currently has more than 800 physicians and 1,600 nurses, as well as more than 900 residents and fellows (physicians working in advanced specialty training in medical science, leading to specialty board certification). Faculty members associated with the Medical Center and BSD ranked third nationally in National Institutes of Health (NIH) research funding per faculty member in 2012.

The medical center is a major provider of health care for the immediate neighborhood of nearly 700,000 people, and has engaged in a long-term effort to construct a more rational collaborative system of doctors' offices, clinics, community hospitals and academic centers to provide care for all the people who live on the South Side of Chicago. Community-based training opportunities include relationships with nearby physicians and hospitals, and an academic affiliation with

the NorthShore University Health System, which includes three suburban hospitals. It has regional burn and perinatal units.

Patients with particularly complex or obscure medical problems travel from all over the world for treatment at the University of Chicago Medicine. The medical center includes the National Cancer Institute-designated University of Chicago Medicine Comprehensive Cancer Center; a Howard Hughes Medical Institute; a National Diabetes Research and Training Center; a National Clinical Nutrition Research Unit; the Special Center for Research in Arteriosclerosis; the MacLean Center for Clinical Medical Ethics; the Bucksbaum Institute for Clinical Excellence; the Joseph P. Kennedy, Jr. Mental Retardation Research Center; the Center for Health and the Social Sciences and the Clinical Pharmacology Center.

It is also the site of two additional national clinical research units and has widely recognized research programs on digestive diseases, anti-cancer medications, cell biology of cardiac and skeletal muscle, transplantation biology, lipoprotein-cell surface interactions, nuclear medicine and imaging, and receptors and response proteins in reproductive tissue.

The medical center is supported by its critical care transport helicopter team, UCAN, which celebrated its 30th anniversary in 2013. It was the first dedicated medial helicopter program in the Chicago area when it began in 1983, and is the only area program to fly with a flight physician.

Requests for an application and other inquiries should be addressed to the Admissions Department, The University of Chicago Pritzker School of Medicine, 924 E. 57th Street, BSLC 104, Chicago, IL 60637. Email:pritzkeradmissions@bsd.uchicago.edu

# NORTHSHORE UNIVERSITY HEALTH SYSTEM

Headquartered in Evanston, Ill., NorthShore University HealthSystem (NorthShore) is a comprehensive, fully integrated, healthcare delivery system that serves the greater North Shore and northern Illinois communities. The system includes four Hospitals – Evanston Hospital, Glenbrook Hospital, Highland Park Hospital and Skokie Hospital. In addition, the health system has more than 2,400 affiliated physicians, including a 600-physician, multispecialty physician group practice with over 70 office locations - NorthShore University HealthSystem Medical Group. Further, NorthShore is committed to excellence in its academic mission and supports teaching and research as the principal teaching affiliate for the University of Chicago Pritzker School of Medicine.

The NorthShore University HealthSystem Research Institute focuses on clinical and translational research, including leadership in outcomes research and clinical trials.

The HealthSystem has significant capabilities in a wide spectrum of clinical programs, including neurosciences, cancer, heart, orthopaedics, high-risk maternity and pediatrics. NorthShore is a national leader in the implementation of innovative technologies, including electronic medical records, (EMR). In 2003, the HealthSystem was among the first in the country to successfully launch a system wide EMR with demonstrable benefits in quality, safety and service to patients.

NorthShore has been recognized by multiple national organizations for this notable achievement.

# COMBINED MD/PHD PROGRAMS IN THE DIVISION OF THE BIOLOGICAL SCIENCES AND PRITZKER SCHOOL OF MEDICINE

The University of Chicago's Pritzker School of Medicine has an exceptionally rich tradition of interdisciplinary scholarship. Each year, typically 15 to 20 percent of the graduating medical school class also graduates with a PhD. In the spirit of this tradition, the Pritzker School of Medicine offers a wide selection of joint degree programs for individuals interested in the critical interface of medicine, biological sciences, and society.

Students interested in combining clinical and biomedical research can combine their MD training with education toward a PhD in one of the degree granting units (see section on Basic Sciences) within the Biological Sciences Division. The Pritzker School of Medicine is also home to several highly competitive and award winning NIH funded MD/PhD training programs including the Medical Scientist Training Program (MSTP) and the Growth and Development Training Program (GDTP). Students interested in pursuing a PhD degree in the Humanities or Social Sciences can do so as part of a unique MD-PhD program in Medicine, Social Sciences and Humanities (MESH). This program includes the NIH funded MD-PhD program in Medicine, the Social Sciences and Aging. Students may also graduate with additional master degrees in business, law or policy.

# MEDICAL SCIENTIST TRAINING PROGRAM

The University of Chicago Medical Scientist Training Program is a challenging interdisciplinary training program in biomedical sciences which leads to an MD from the Pritzker School of Medicine and to a PhD in the newly-created Interdisciplinary Scientist Training Program (ISTP). Our trainees graduate prepared to assume successful leadership roles in the evolving world of 21<sup>st</sup> century academic biomedicine. Being one of the earliest programs to obtain federal funding in 1967, the MSTP at the University of Chicago is currently one of the longest running in the country.

The MD is awarded through the Pritzker School of Medicine, one of the top 15 graduate schools in the nation. With the introduction of the Pritzker Initiative in Autumn 2009, students will be educated in smaller classes with more individual attention from faculty, with an emphasis on active learning and scholarship, will be integrated among disciplines when possible, and in an atmosphere that highlights the relationship between basic and clinical sciences.

For their graduate work, trainees will be part of the ISTP, the degree-granting arm of the MSTP. This program is a novel, adaptable mechanism for students to obtain highly-integrated, interdisciplinary training. Trainees will be part of a flexible PhD program that offers superb educational opportunities and rigorous training in the highly integrated environment of Chicago Biomedicine at The University of

Chicago. The ISTP also provides a programmatic identity that fosters a seamless progression of our students through the medical and graduate phases of their training.

The program is designed for students who seek broad careers in biomedical related research and a desire to apply both clinical and research expertise to solve the most pressing problems in medical science. Typically students begin their full-time PhD research after completion of their second year of medical studies and return to medical school after they have successfully defended their PhD thesis. On average, MSTP trainees complete both degrees in 8 years.

# Growth and Development Training Program

The Growth and Development Training Program (GDTP) is a unique opportunity available to University of Chicago medical students who decide to pursue an advanced PhD degree after they have started medical school. The program began over 40 years ago and in 2003 received the first NICHD Mentor Award for Excellence in Research Training.

Entry into the program is available for students who have completed two years (occasionally one year) of medical studies. Students wishing to be considered for the program generally acquire relevant laboratory experience, fulfill at least some graduate courses requirements and seek out a research sponsor and graduate degree unit during their first two years of medical studies, in anticipation of their application to the program.

The program is unique in that it offers medical students the opportunity to pursue a Ph.D. degree after they have started medical school. This represents a major opportunity for students at the Pritzker School of Medicine, who frequently become so enthusiastic about research during their first or second year of medical school that they decide to take a leave from medical studies to pursue a Ph.D. degree. A wide variety of Ph.D. degree granting units is available to trainees, most often in the Biological Sciences Division.

Students interested in the program may submit formal applications in the winter quarter of their first or second year of medical studies. When all necessary supporting material, including transcripts and letters of recommendation, is received, the students undergo two formal interviews. Decisions are announced in the spring, with appointment to the grant in July. Demonstrated interest and commitment to basic research, as evidenced by prior experience and accomplishment, as well as strong academic record, are major criteria for selection.

Trainees in the program receive a maximum of five years of support which generally includes three years of support during the Ph.D. phase and the remainder of the M.D. training (the two clinical years). Financial aid covers full tuition, fees and a stipend supplemented to national competitive levels to support living expenses.

For further information about this program, please visit: http://pritzker.uchicago.edu/jointdegrees/gdtp/

# MD-PHD PROGRAM IN MEDICINE, SOCIAL SCIENCES AND HUMANITIES (MESH)

The program is based on the premise that physicians should acquire special competence in another area of scholarship in order to address the overlapping social, economic, scientific, ethical, legal and humanistic problems which medicine as an enterprise, and as a profession, faces today.

Doctoral studies may be pursued in any of the departments within the social sciences (including Anthropology, Economics, History, Philosophy, Political Science, Psychology or Sociology) or humanities, in the Committee on Social Thought or the Conceptual and Historical Studies of Science Division, or the schools of divinity or public policy. Research may also be conducted through the Center for Health and the Social Sciences, the Morris Fishbein Center for the Study of the History and Science of Medicine, or the MacLean Center for Clinical Medical Ethics. Following completion of their doctoral studies, students in the program are expected to return to medical school to resume work toward the M.D. degree.

For further information about this program, please visit: http://pritzker.uchicago.edu/jointdegrees/mesh/



# THE DIVISION OF THE HUMANITIES

#### Dean

- Martha Roth
   Dean of Students
- Martina Munsters

Students in the Division of the Humanities investigate the varied achievements of the human mind in language and literature, music, the visual arts, and philosophy. These investigations can range from the methods of the established humanistic disciplines to the newer alliances of humanities and social sciences, from the history of a civilization to the philosophy of science, from the aesthetics of a literary genre to the broader cultural occasions that bring the visual arts into contact with linguistic theory or musicology into contact with anthropology. The division regards a multiplicity of questions and approaches as the hallmark of its intellectual life and encourages its students to share in this diversity.

The academic units of the division guide and support the students' scholarly interests and inquiry and are correspondingly varied. These programs of study are described in detail in this section of the Announcements.

The University is known for its interdisciplinary approach. Students cross disciplines easily by taking courses in different fields as well as through participation in Graduate Workshops, established under the auspices of the Council on Advanced Studies. These interdisciplinary workshops bring together students and faculty in the Divinity School, the Division of the Humanities, and the Division of Social Sciences for ongoing and collaborative exchange of ideas around particular areas of interest. Interdisciplinary work also takes place in many different venues such as the Centers for Area Studies, Interdisciplinary Centers, and Interdisciplinary Programs. The interdisciplinary and area centers are described in another section of these Announcements.

# ADMISSION TO THE DIVISION

The Division of the Humanities invites applications from students whose breadth of academic experience and fitness for the specific field of study suggest the potential for scholarly achievement. In general, only applicants holding the bachelors degree or equivalent, with excellent academic records, are admitted. Faculty recommendations and the applicant's statement of purpose are carefully weighed. Research papers, publications, and other works may also be considered by the admissions committees during their evaluations. The admissions selection committee for each department reviews all the applications submitted by the December deadline for admission for autumn quarter of the following year. During this selection, all available places and financial aid are allocated for the following academic year. An offer of admission is made only for the next academic year and

cannot be deferred. Most programs, particularly those with intensive language requirements, are designed to start in the autumn quarter.



# MASTER OF ARTS PROGRAM IN THE HUMANITIES

#### Director

- David Wray, Associate Professor in the Department of Classics and the College Deputy Directors
- Benjamin Callard, MAPH/Philosophy Coordinator
- Hilary Strang, MAPH/English & Literary Studies Coordinator

The Master of Arts Program in the Humanities (MAPH) is an intensive one-year interdisciplinary program leading to the A.M. degree. MAPH is designed to address the diverse needs and interests both of intellectual generalists and of specialists who stand to benefit from a year of intensive work in the humanities. Many MAPH students are recent college graduates. Others are professionals at mid-career, freelance writers, or performers. They hold undergraduate degrees from public and private institutions throughout the world, in disciplines ranging from biology to English to marketing. A number come with extensive experience in non-academic fields, including independent film-making, politics, science, non-profit work, and business.

Approximately half the students in MAPH plan to continue their studies at the doctoral level in preparation for a career in university teaching and research. For these students, MAPH provides an ideal setting for clarifying their academic and professional goals and offers a year of intensive preparation for competitive Ph.D. programs.

MAPH's emphasis on critical writing, analytical thinking, scholarly research, and flexible cultural perspectives has also proved invaluable for those interested in careers in cultural institutions and cultural policy, publishing, journalism, business, politics, secondary school or community college teaching, and the full spectrum of the nonprofit sector.

# DEGREE REQUIREMENTS

Requirements for the A.M. degree include:

- The fall quarter MAPH Core Course, Foundations of Interpretive Theory (known to MAPH students as "Core"). Core begins two weeks before regular University classes and covers seminal works by thinkers such as Freud, Lacan, and Marx. It is taught by the MAPH Director and Deputy Directors and may include guest lectures by distinguished faculty members from different disciplines. The course is designed to give MAPH students a shared base for their further study.
- Seven elective courses chosen from the Division of the Humanities, Social Sciences, or the other divisions and professional schools. The choice of these courses is left largely to the student, although a program of study will be designed in consultation with and approved by the student's preceptor and

other faculty advisers. Some students concentrate their courses in one field of study; others take a wide-ranging variety of courses in multiple disciplines. Most programs of study fall somewhere in between these two extremes.

MAPH also offers several Program Options, developed in consultation with Humanities Division departments and committees, which provide guidance in selecting electives for interested students. The Options include programs of study designed by Classics, Cinema and Media Studies, the Cultural Policy Center in the Harris School of Public Policy Studies, and the Committee on Creative Writing. The MAPH Creative Writing Option is the University of Chicago's alternative to a traditional MFA.

A master's thesis of 25 to 35 pages, produced under the supervision of a faculty
thesis adviser and a preceptor, and completed toward the end of the spring
quarter. In conjunction with thesis preparation, students take a thesis workshop,
which involves small group meetings focused on the development of thesis
topics and the writing of the thesis. MAPH thesis projects range from traditional
research papers to creative works accompanied by a critical assessment.

# **PRECEPTORS**

Preceptors are advanced graduate students or recent Ph.D.s, each of whom oversees the progress of 10-12 MAPH students. Each student is assigned a preceptor for the academic year. In addition to serving as a general adviser, the preceptor leads small discussion groups in connection with the Core course and leads the winter and spring thesis workshops. Preceptors also offer courses specially designed for MAPH students in the winter and spring quarters.

# ADMISSION

Applicants to MAPH must meet the general divisional requirements for admission and will submit a critical writing sample of no more than 15 pages. Students applying to the MAPH Creative Writing Option must also submit a substantial creative writing sample in their chosen genre (e.g., several poems, a short story, a chapter from a work of longer fiction in progress, a play, or a 10-15 page work of creative nonfiction).

For further information, visit the MAPH website at http://maph.uchicago.edu/ or email ma-humanities@uchicago.edu or phone (773) 834-1201.

To apply, go to https://apply-humanities.uchicago.edu/apply/.

# MASTER OF ARTS PROGRAM IN THE HUMANITIES COURSES

## MAPH 33000. Methods and Issues in Cinema Studies. 100 Units.

This course offers an introduction to ways of reading, writing on, and teaching film. The focus of discussion will range from methods of close analysis and basic concepts of film form, technique and style; through industrial/critical categories of genre and authorship (studios, stars, directors); through aspects of the cinema as a social institution, psycho-sexual apparatus and cultural practice; to the relationship between filmic texts and the historical horizon of production and reception. Films discussed will include works by Griffith, Lang, Hitchcock, Deren, Godard.

Instructor(s): Staff Terms Offered: Autumn

Equivalent Course(s): ENGL 48000, CMST 40000

# MAPH 33700. History of International Cinema II: Sound Era to 1960. 100 Units.

The center of this course is film style, from the classical scene breakdown to the introduction of deep focus, stylistic experimentation, and technical innovation (sound, wide screen, location shooting). The development of a film culture is also discussed. Texts include Thompson and Bordwell's *Film History: An Introduction*; and works by Bazin, Belton, Sitney, and Godard. Screenings include films by Hitchcock, Welles, Rossellini, Bresson, Ozu, Antonioni, and Renoir.

Instructor(s): T. Gunning Terms Offered: Winter

Prerequisite(s): Prior or concurrent registration in CMST 10100 required. Required of students majoring in Cinema and Media Studies.

Note(s): CMST 28500/48500 strongly recommended

Equivalent Course(s): CMST 28600,ARTH 28600,ARTH 38600,ARTV 26600,CMLT 22500,CMLT 32500,CMST 48600,ENGL 29600,ENGL 48900

# MAPH 36000. History of International Cinema I: Silent Era. 100 Units.

This course introduces what was singular about the art and craft of silent film. Its general outline is chronological. We also discuss main national schools and international trends of filmmaking.

Instructor(s): J. Lastra Terms Offered: Autumn

Prerequisite(s): Prior or concurrent registration in CMST 10100 required. Required of students majoring in Cinema and Media Studies.

Note(s): This is the first part of a two-quarter course.

Equivalent Course(s): CMST 28500,ARTH 28500,ARTH 38500,ARTV 26500,ARTV 36500,CMLT 22400,CMLT 32400,CMST 48500,ENGL 29300,ENGL 48700

# MAPH 40000. Human Rights I: Philosophical Foundations of Human Rights. 100 Units.

Human rights are claims of justice that hold merely in virtue of our shared humanity. In this course we will explore philosophical theories of this elementary and crucial form of justice. Among topics to be considered are the role that dignity and humanity play in grounding such rights, their relation to political and economic institutions, and the distinction between duties of justice and claims of charity or humanitarian aid. Finally we will consider the application of such theories to concrete, problematic and pressing problems, such as global poverty, torture and genocide. (V) (I)

Instructor(s): Staff Terms Offered: Spring

Equivalent Course(s): HMRT 20100,HMRT 30100,PHIL 21700,PHIL 31600,HIST

29301,HIST 39301,INRE 31600,LAWS 41200,LLSO 25100



# Master of Arts in Latin American Studies - Humanities

# Director | Mauricio Tenorio, Department of History and the College Student Affairs Coordinator | Jamie Gentry

e-mail: jagentry@uchicago.edu

phone: 773.702.8420

Please see the entry for Center for Latin American Studies (p. 71) for the list of the Latin American Studies faculty committee, also available at http://maclas.uchicago.edu/.

The Center for Latin American Studies administers a Master of Arts degree program in Latin American Studies. The Master of Arts program is a one year program of graduate studies that provides students with a thorough knowledge of the cultures, history, politics, and languages of the region. Students benefit from various resources that put the University of Chicago at the forefront of research and scholarship on Latin America, including world renowned faculty, top quality library resources, graduate workshops, and field research grant opportunities. Please see the Center for Latin American Studies entry in the Graduate Announcements for full details on Center resources. The Center also administers a Bachelor of Arts (major and minor) in Latin American Studies (for details please see http://clas.uchicago.edu/programs/).

The master's program attracts students who will benefit from interdisciplinary training in a highly individualized and flexible program. Each student works closely with faculty and the program advisor to design a customized curriculum, define an area of scholarly research, and write a master's paper. Students take advantage of the program's flexibility to advance their academic and/or career objectives before making a major professional or educational commitment. Some students approach a research interest from a multidisciplinary perspective. Others strengthen their training in a single discipline as it relates to Latin American Studies, or explore new fields

Through the M.A. Proseminar, the required common core of the master's program, students gain a critical understanding of the major theoretical approaches, principal research methods, and current trends in Latin American Studies. During the winter quarter of the Proseminar students develop the proposal for their master's paper. The master's paper is meant to demonstrate the student's ability to apply formal training in Latin American Studies toward a specific and original research problem. Primary Latin Americanist faculty at the University of Chicago serve as guest lecturers in the Proseminar to introduce students to their research.

The master's program provides students with the opportunity to develop and enhance skills and knowledge appropriate for careers related to Latin America or as preparation for further graduate work or professional training. Graduates of the program enter or return to careers for which the master's degree is increasingly an entry-level requirement, including secondary and higher education, government,

business, and various cultural organizations and non-profit agencies. Others enter doctoral and professional degree programs with support and advice from Latin American Studies staff and faculty.

# ADMISSION TO THE MASTER'S PROGRAM

Prospective students to the Master of Arts program in Latin American Studies may apply to the program through the Division of the Social Sciences or through the Division of the Humanities and will receive the degree from the division through which they have been admitted.

# INFORMATION ON HOW TO APPLY

The application process for admission and financial aid for all graduate programs in is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online:

Division of the Humanities:http://humanities.uchicago.edu/prospective/admissions.html

Social Sciences Division: https://socialsciences.uchicago.edu/admissions

Foreign students must provide evidence of English proficiency by submitting scores from either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS). Current minimum scores, etc., are provided with the application.

Students who wish to earn a Ph.D. degree should apply to a degree program in one of the graduate departments or committees in the Division of the Humanities or the Division of the Social Sciences. Foreign students should be advised that in the United States completion of a master's degree program is generally not a prerequisite to entering a Ph.D. program.

# Program Requirements

Upon entering the program, students will work under academic direction of the CLAS Associate Director to develop a specific program of study, cultivate their research interests, and identify a faculty advisor for their master's paper. The basic components of the master's program are described below.

# LANGUAGES

A fundamental requirement of the program is proficiency in one of the spoken languages (other than English) of Latin America and the Caribbean. This requirement normally will be met in Spanish or Portuguese. However, substitution of an Amerindian language (such as Aymara, K'iche' Maya, or Yucatec Maya) or a language spoken in the Caribbean (such as Hatian Creole) is permissible with the approval of the program advisor. Petitions for substitution will be evaluated in light of the student's prior competency and curricular program and the adequacy of instructional resources in the substitute language. Advanced Proficiency Examinations will be administered to evaluate the entering student's language skills.

Students usually meet the language requirement through the Advanced Proficiency Examination in Spanish or Portuguese.

# COURSE REQUIREMENTS

The standard course requirement is nine quarter courses, to be met as follows: the M.A. Proseminar in Latin American Studies; five courses in Latin American and Caribbean Studies; and three elective courses. Students are expected to fulfill the language requirement through proficiency examination, and complete the master's program in three quarters of course work. In consultation with the program advisor, the student will select three elective courses suited to individual curricular interests. These courses may be selected from the offerings in the divisions and professional schools of the University. Non degree graduate level courses at the University completed prior to admission to the master's program may be used in fulfillment of elective requirements, upon approval of the program advisor.

Credits towards the Master of Arts in Latin American Studies must be taken at the graduate level (courses designated as 30000 or above). However, certain lower level courses may be accepted, at the discretion of the program advisor. All course requirements can be met in three academic quarters.

### THE MASTER'S PAPER

In addition to the course requirements outlined above, every master's degree candidate is required to submit a master's paper. This paper is meant to demonstrate the student's ability to apply formal training in Latin American and Caribbean studies toward a specific research problem developed over the course of the program. The research and writing of this paper will be conducted under the guidance of a faculty advisor. A student may register for the course LACS 40300 Master's Paper Preparation, which is arranged on an individual basis with the faculty advisor for the project. This course, while optional, may be counted as one of the five required Latin American Studies core courses.

# COURSES

Courses pertinent to the Latin American area are offered through the individual departments and committees of the Divisions of the Social Sciences and the Humanities, and through the University's professional schools. Please refer to the listings in these Announcements and in the quarterly Time Schedules for specific offerings. Additionally, special courses are offered by senior visiting Latin Americanist faculty through the Center's Tinker Visiting Professorship. Each quarter the Center compiles a comprehensive list of Latin American and Caribbean courses to be offered at the University available at http://maclas.uchicago.edu/page/courses.

For additional information about the Master of Arts in Latin American Studies program, please see http://maclas.uchicago.edu/ or call (773) 702-8420.

# LATIN AMERICAN & CARIBBEAN STUDIES COURSES

# LACS 30401. Intensive Study of a Culture: Lowland Maya History and Ethnography. 100 Units.

The survey encompasses the dynamics of first contact; long-term cultural accommodations achieved during colonial rule; disruptions introduced by state and market forces during the early postcolonial period; the status of indigenous communities in the twentieth century; and new social, economic, and political challenges being faced by the contemporary peoples of the area. We stress a variety of traditional theoretical concerns of the broader Mesoamerican region stressed (e.g., the validity of reconstructive ethnography; theories of agrarian community structure; religious revitalization movements; the constitution of such identity categories as indigenous, Mayan, and Yucatecan). In this respect, the course can serve as a general introduction to the anthropology of the region. The relevance of these area patterns for general anthropological debates about the nature of culture, history, identity, and social change are considered.

Instructor(s): J. Lucy Terms Offered: Autumn

Note(s): Not offered 2013-14

# LACS 30603. Image and Text in Mexican Codices. 100 Units.

,In most Mesoamerican languages, a single word describes the activities that we would call "writing" and "painting." This seminar will investigate the interrelationships between image and text in Central Mexico both before and immediately after the introduction of alphabetic writing in the 16th century. We will also review art historical and archaeological evidence for the social conditions of textual and artistic production in Mexico, and how these traditions were transformed under Spanish colonial rule. We will consider the materiality of text and image by working with facsimiles of Mesoamerican books in the Special Collections of the Regenstein Library. At the end of the course, students will have acquired a basic literacy in Aztec and Mixtec writing systems, and will have refined their ability to look productively and write elegantly about art.

Instructor(s): C. Brittenham Terms Offered: Spring

Equivalent Course(s): ARTH 20603, ARTH 30603, LACS 20603

# LACS 31700. Slavery and Unfree Labor. 100 Units.

This course offers a concise overview of institutions of dependency, servitude, and coerced labor in Europe and Africa, from Roman times to the onset of the Atlantic slave trade, and compares their further development (or decline) in the context of the emergence of New World plantation economies based on racial slavery. We discuss the role of several forms of unfreedom and coerced labor in the making of the "modern world" and reflect on the manner in which ideologies and practices associated with the idea of a free labor market supersede, or merely mask, relations of exploitation and restricted choice.

Instructor(s): S. Palmié Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 22205, ANTH 31700, CRES 22205, LACS 22205

# LACS 31900. ¿Cuerpos Desechables? Estéticas de la No-Vida en las Literaturas Hispanoamericanas (de la Conquista al siglo XXI) 100 Units.

In this seminar we will conduct a theoretical exploration of the aesthetic procedures through which human life has been represented as expendable in Spanish-American literature from the Conquest to the twenty-first century, as well as an examination of the historical and philosophical contexts within which such figurations emerged. The course will focus on case studies that correspond to four key moments in the history of the region: conquest and colonization, slavery and the formation of national states in the nineteenth century, the triumph of a capitalist export economy at the turn of the twentieth, and the violent challenges posed by globalization and narcotráfico in the contemporary context. Among the issues and texts we may engage are Fray Bartolomé de las Casas and Francisco de Vitoria's sixteenth-century dispute on the right of conquest and the *Brevísima relación de la destrucción de las Indias*, Esteban Echevarría's *El matadero*, Lucio Mansilla's *Una excursión a los indios ranqueles*, Juan F. Manzano's *Autobiografía de un esclavo*, Manuel Zeno Gandía's *La charca*, and Fernando Vallejo's *La virgen de los sicarios*.

Instructor(s): A. Lugo-Ortiz Terms Offered: Spring

# LACS 32501-32502-32503. Elementary Haitian Kreyol I-II-III.

This 3 course sequence will provide students with an in-depth study of the Haitian Kreyol language in its modern context, with emphasis on developing students' proficiency in speaking and writing, and in listening and reading comprehension. The course will also provide necessary cultural and historical context.

# LACS 32501. Elementary Haitian Kreyol I. 100 Units.

Instructor(s): Lecturer Terms Offered: Autumn

Equivalent Course(s): LACS 22501

# LACS 32502. Elementary Haitian Kreyol II. 100 Units.

Terms Offered: Winter

Equivalent Course(s): LACS 22502

# LACS 32503. Elementary Haitian Kreyol III. 100 Units.

Terms Offered: Spring

Equivalent Course(s): LACS 22503

# LACS 32502. Elementary Haitian Kreyol II. 100 Units.

Terms Offered: Winter

Equivalent Course(s): LACS 22502

#### LACS 32503. Elementary Haitian Kreyol III. 100 Units.

Terms Offered: Spring

Equivalent Course(s): LACS 22503

#### LACS 34130. The Production of the Artist. 100 Units.

This course will develop a conversation about what constitutes the image of the contemporary artist. Written exercises will contribute to the development of the problem of how one produces oneself as an artist. The history of dematerialization in art practice from the 1960's, and the discussion of globalization that emerged in the 1980's will be brought to bear. How is the role and identity of the artist constructed in relation to various histories and to the prevailing movements of the moment such as institutional critique and relational aesthetics? This course is open to students of all disciplines who are interested in how the artist is constructed, not only as role or identity, but as a production site.

Instructor(s): R. Basbaum Terms Offered: Autumn

Equivalent Course(s): ARTV 34130, LACS 24130, ARTV 24130

# LACS 34512-34513-34514. Intermediate Haitian Kreyol I-II-III.

This 3 course sequence will enhance students' understanding of Haitian Kreyol with continued study of the language in its modern context, with emphasis on developing students' proficiency in speaking, writing, listening, and reading comprehension at an intermediate level.

# LACS 34512. Intermediate Haitian Kreyol I. 100 Units.

Terms Offered: Autumn

Equivalent Course(s): LACS 24512

# LACS 34513. Intermediate Haitian Kreyol II. 100 Units.

Terms Offered: Winter

Equivalent Course(s): LACS 24513

# LACS 34514. Intermediate Haitian Kreyol III. 100 Units.

Terms Offered: Spring

Equivalent Course(s): LACS 24514

# LACS 34513. Intermediate Haitian Kreyol II. 100 Units.

Terms Offered: Winter

Equivalent Course(s): LACS 24513

# LACS 34514. Intermediate Haitian Kreyol III. 100 Units.

Terms Offered: Spring

Equivalent Course(s): LACS 24514

# LACS 34600-34700-34800. Introduction to Latin American Civilization I-II-III.

Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies. This sequence is offered every year. This course introduces the history and cultures of Latin America (e.g., Mexico, Central and South America, and the Caribbean Islands).

### LACS 34600. Introduction to Latin American Civilization I. 100 Units.

Autumn Quarter examines the origins of civilizations in Latin America with a focus on the political, social, and cultural features of the major pre-Columbian civilizations of the Maya, Inca, and Aztec. The quarter concludes with an analysis of the Spanish and Portuguese conquest, and the construction of colonial societies in Latin America.

Terms Offered: Autumn

Equivalent Course(s): LACS 16100, ANTH 23101, CRES 16101, HIST 36101, SOSC 26100

### LACS 34700. Introduction to Latin American Civilization II. 100 Units.

Winter Quarter addresses the evolution of colonial societies, the wars of independence, and the emergence of Latin American nation-states in the changing international context of the nineteenth century.

Terms Offered: Winter

Equivalent Course(s): ANTH 23102, CRES 16102, HIST 16102, HIST 36102, LACS 16200, SOSC 26200

# LACS 34800. Introduction to Latin American Civilization III. 100 Units.

Spring Quarter focuses on the twentieth century, with special emphasis on the challenges of economic, political, and social development in the region.

Terms Offered: Spring

Equivalent Course(s): ANTH 23103,CRES 16103,HIST 16103,HIST 36103,LACS 16300,SOSC 26300

### LACS 34700. Introduction to Latin American Civilization II. 100 Units.

Winter Quarter addresses the evolution of colonial societies, the wars of independence, and the emergence of Latin American nation-states in the changing international context of the nineteenth century.

Terms Offered: Winter

Equivalent Course(s): ANTH 23102, CRES 16102, HIST 16102, HIST 36102, LACS 16200, SOSC 26200

# LACS 34800. Introduction to Latin American Civilization III. 100 Units.

Spring Quarter focuses on the twentieth century, with special emphasis on the challenges of economic, political, and social development in the region.

Terms Offered: Spring

Equivalent Course(s): ANTH 23103,CRES 16103,HIST 16103,HIST 36103,LACS 16300,SOSC 26300

# LACS 35011. Africa, America. 100 Units.

This seminar explores the dynamic exchanges in the expressive cultures of Africa and the Americas. It examines a range of visual and material traditions that emerged and grew from the sustained contact between the two continents from the era of the Atlantic Slave Trade to the present. Class discussion, readings, assignments, and museum visits address topics such as carnival performances, santería and candomblé traditions, Vodou ritual forms, Luso-African architecture on both continents, and contemporary art.

Instructor(s): C. Fromont Terms Offered: Winter

Equivalent Course(s): ARTH 25011, ARTH 35011, LACS 25011

# LACS 36201. Race, Ethnicity and Politics in Comparative Perspective. 100 Units.

The primary objective of this course is to offer a comparative approach to understanding the relationship between race, inequality, and politics. It focuses primarily on examples from Latin America and the United States, and is organized in three sections. In the first, we explore the relationship between capitalist expansion, the modern-nation, state and the socio-historical construction of "race". In the second section, we explore differences in political elites' approaches to the question of race in the period of nation building. We discuss how different ethnoracial groups were incorporated into, or excluded from, the nation both through legal institutions and nationalist ideologies. In the final section, we analyze the emergence of black and indigenous social movements as a critical response to the failure of the nationalist project. Throughout the course we analyze the different ways race, ethnicity, and identity are understood in these distinct contexts, and also explore how race intersects with other axes of power, such as class and gender. (C) Instructor(s): T. Paschel Terms Offered: Autumn

Equivalent Course(s): PLSC 36201

# LACS 36304. Literature and Society in Brazil. 100 Units.

This course surveys the relations between literature and society in Brazil, with an emphasis on the institution of the novel in the nineteenth and early twentieth centuries. The nineteenth-century Brazilian novel, like the Russian novel, was an arena in which intellectuals debated, publicized, and perhaps even discovered social questions. We will examine ways in which fiction has been used and misused as a historical document of slavery and the rise of capitalism, of race relations, of patronage and autonomy, and of marriage, sex, and love. We will read works in translation by Manuel Antonio de Almeida, Jose de Alencar, Machado de Assis, Aluisio de Azevedo, and others.

Instructor(s): D. Borges Terms Offered: Spring

Equivalent Course(s): LACS 26304, HIST 36304, HIST 26304

#### LACS 36602. Brazilian Literature and Cinema. 100 Units.

In this class, we will discuss the intricate and complex relationship between literature and film in Brazilian culture. Should film adaptations be faithful to the novels by which they were inspired? Should such films be regarded as interpretations of the original text or should they be evaluated as an autonomous cultural production? What role do they play in the process of canonization of a literary work? Those are questions that we will try to answer throughout the quarter.

Instructor(s): A. Melo Terms Offered: Autumn

Note(s): All the books will be available in English. Taught in English with an additional weekly session in Portuguese for students seeking Portuguese credit. Equivalent Course(s): PORT 36502,LACS 26602,PORT 26502

# LACS 36802. Bunuel and Surrealism. 100 Units.

Description forthcoming.

Instructor(s): Jim Lastra Terms Offered: Winter

Equivalent Course(s): CMST 26802, LACS 26802, CMST 36802

# LACS 37004. Lusophone Postcolonial Studies. 100 Units.

The main goal of this seminar is to discuss the specificities and predicaments of Lusophone Postcolonial Studies. In what sense can Portuguese colonialism be compared to its British and French counterparts? What was the role played by Brazil in the relation between Portugal and Lusophone Africa? (Did Brazil represent a model to be followed by African anti-colonial intellectuals in their search for political and cultural independence? Or was Brazil complicit with Portuguese colonialism?) How should we account for this kind of South-South relationship between Brazil and Lusophone African countries? These are the questions we will address in this seminar.

Instructor(s): A. Melo Terms Offered: Autumn

Note(s): Taught in English with an additional weekly session in Portuguese for students seeking Portuguese credit.

Equivalent Course(s): PORT 37000, LACS 27004, PORT 27000

#### LACS 39503. Mexican Murals. 100 Units.

This course examines three vital moments of mural production in Mexico: ancient, colonial, and modern. We will begin by looking at indigenous Mesoamerican wall painting traditions of Teotihuacan, the Maya, Cacaxtla, and the Aztecs, and then consider how these traditions were transformed by the encounter with Spanish colonialism to provide decoration for the walls of monastic churches. Finally, we will examine the modern Mexican muralist movement, looking at the work of Diego Rivera, José Clemente Orozco, David Alfaro Siqueiros, and others, with a particular focus on Rivera's murals at the Detroit Institute of Arts. Throughout the course, we will consider mural paintings in relationship to architecture and other media, paying special attention to the different methodologies and kinds of evidence that have been used to interpret these works. The course will also focus on developing research, writing, and presentation skills.

Instructor(s): C. Brittenham Terms Offered: Winter

Equivalent Course(s): ARTH 39503, LACS 29503, ARTH 29503

#### LACS 40100. Reading and Research in Latin American Studies. 100 Units.

Terms Offered: Autumn, Winter, Spring, Summer

Prerequisite(s): Consent of faculty supervisor and program adviser

Note(s): Students are required to submit the College Reading and Research Course

Form. Typically taken for a quality grade.

Equivalent Course(s): LACS 29700

#### LACS 40300. MA Paper Pre: Latin American Studies. 100 Units.

Terms Offered: Autumn, Winter, Spring, Summer Prerequisite(s): Instructor Consent required

#### LACS 40305. The Inka and Aztec States. 100 Units.

This course is an intensive examination of the origins, structure, and meaning of two native states of the ancient Americas: the Inka and the Aztec. Lectures are framed around an examination of theories of state genesis, function, and transformation, with special reference to the economic, institutional, and symbolic bases of indigenous state development. This course is broadly comparative in perspective and considers the structural significance of institutional features that are either common to or unique expressions of these two Native American states. Instructor(s): A. Kolata Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 20100, ANTH 40100, LACS 20100

#### LACS 40501. MA Proseminar. 100 Units.

Required course for the master's in Latin American Studies degree program. Students will gain an introduction to the variety of disciplinary approaches, discourses, and foci that fall under the large rubric of Latin American Studies. The proseminar introduces students to specialists in the field at the University of Chicago and to the research and investigation in which they are involved. Open only to program students.

Terms Offered: Autumn

#### LACS 42500. Anthropology of the Afro-Atlantic World. 100 Units.

Although originally pioneered, more than three generations ago, by scholars and critics such as C.L.R. James, Eric Williams, W.E.B. DuBois, or Walter Rodney, conceptions of an "Atlantic World" have only recently come to prominence in Anthropology. In the past decade, however, students of Africa and the Americas have increasingly begun to phrase their inquiries in terms transcending entrenched geographical divisions of labor within the social sciences, aiming to include Africa, the Americas, and, to a certain extent, Europe into a single analytic field. Parts of this course will be devoted to a concise introduction to some of the major theoretical positions within, and controversies surrounding the new "Atlantic" anthropology of Africa and its New World diasporas. After this, we will examine a number of recent monographs and/or major articles exemplifying the promises and pitfalls of theoretical conceptions and methodological procedures that attempt to go beyond mere transregional comparison or linear historical narratives about "African influences", and aim at analytically situating specific ethnographic or historical scenarios within integrated perspectives on an "Afro-Atlantic World". Instructor(s): S. Palmié.

Equivalent Course(s): ANTH 42500

#### LACS 44612. Political Economy of Corruption and Development. 100 Units.

This course is a graduate-level seminar covering recent theoretical and empirical research, organized around the following questions. First, what are the consequences of corruption for socio-economic development? Does corruption help or hinder it? Second, what are the causes of corruption? Is corruption affected by political and economic institutions, regime type, bureaucracy, resource endowments, or culture? Third, why has corruption varied over time within a country or state? On the empirical side, the course will emphasize issues of measurement and inference: how can one draw reliable conclusions about these questions, and what are the pitfalls along the way? The empirical readings encompass qualitative, quantitative, observational, and experimental approaches. (C)

Instructor(s): A. Simpser Terms Offered: Spring

Equivalent Course(s): PLSC 44612

#### LACS 47814. Advanced Seminar in Mesoamerican Linguistics. 100 Units.

Instructor(s): John Lucy Terms Offered: Autumn, Winter, Spring

### LACS 47901-47902-47903. Beginning Modern Spoken Yucatec Maya I; Modern Spoken Yucatec Maya II; Beginning Modern Spoken Yucatec Maya III.

This course is a basic introduction to the modern Yucatec Maya language, an indigenous American language spoken by about 750,000 people in southeastern Mexico. Three consecutive quarters of instruction are intended for students aiming to achieve basic and intermediate proficiency. Students receiving FLAS support must take all three quarters. Others may elect to take only the first quarter or first two quarters. Students wishing to enter the course midyear (e.g., those with prior experience with the language) must obtain consent of instructor. Materials exist for a second year of the course; interested students should consult the instructor. Students wishing to continue their training with native speakers in Mexico may apply for FLAS funding in the summer.

#### LACS 47901. Beginning Modern Spoken Yucatec Maya I. 100 Units.

Instructor(s): John Lucy

Equivalent Course(s): CHDV 27901, CHDV 47901, LACS 27901

#### LACS 47902. Modern Spoken Yucatec Maya II. 100 Units.

Instructor(s): John Lucy Terms Offered: Winter

Equivalent Course(s): LACS 27902

#### LACS 47903. Beginning Modern Spoken Yucatec Maya III. 100 Units.

Instructor(s): J. Lucy

Equivalent Course(s): CHDV 27903, CHDV 47903, LACS 27903

#### LACS 47902. Modern Spoken Yucatec Maya II. 100 Units.

Instructor(s): John Lucy Terms Offered: Winter

Equivalent Course(s): LACS 27902

#### LACS 47903. Beginning Modern Spoken Yucatec Maya III. 100 Units.

Instructor(s): J. Lucy

Equivalent Course(s): CHDV 27903, CHDV 47903, LACS 27903

#### LACS 60302. Colloquium: Immigration and Assimilation. Units.

This course explores the history of immigration in what is now the United States, starting with the colonial origins of Spanish, French, Dutch and English settlements, the importation of African slaves, and the massive waves of immigrants that arrived in the nineteenth and twentieth century. Additionally, we will study the adaptation of these immigrants, exploring the validity of the concept of assimilation, comparing and contrasting the experiences of the "Old" and "New" immigrants based on their race, religion, and class standing.

Instructor(s): R. Gutierrez Terms Offered: Autumn Equivalent Course(s): HIST 60302,GNSE 60300



### Master of Arts in Middle Eastern Studies - Humanities

#### Director

 Fred M. Donner Deputy Director

Paul E. Walker

- Franklin Lewis
   Deputy Director for Academic Programs
- Thomas E. R. Magu
- Thomas E. R. Maguire Project Assistant
- Traci Lombré
   Public Education Project Director
- Alexander Barna

Please see entry for Center for Middle Eastern Studies for the list of Middle Eastern Studies faculty, also available at http://cmes.uchicago.edu/.

The Center for Middle Eastern Studies offers an interdisciplinary Master of Arts program designed for students who wish to use their knowledge of the Middle East in careers other than university teaching and research. The program is also suitable for students considering an academic career who have not had the appropriate academic background for direct entrance into a doctoral program. Language and area studies preparation may be supplemented by relevant course work in a professional school or department. Students may be admitted to the Master of Arts program in either the Division of the Social Sciences or the Humanities and will receive the degree from the division through which they have registered. Students with significant previous training in Middle Eastern or Islamic studies who wish to earn a doctoral degree leading to careers in research and college or university teaching should apply for admission directly to one of the graduate doctoral departments or committees of the University.

#### **ADMISSION**

Applicants for the Master of Arts in Middle Eastern Studies are expected to meet the graduate admissions requirements of the University and of the division to which they apply. In addition, applicants to the Middle Eastern Studies program must submit an academic writing sample. Foreign students must provide evidence of English proficiency by submitting scores from either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS).

Students are encouraged to enter the program in the autumn quarter. Although the program is designed for full time students, applications from those who can attend only on a part time basis will be considered. The application process for admission and financial aid for all graduate programs in Humanities is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online at: http://humanities.uchicago.edu/prospective/admissions.html.

Questions pertaining to admissions and aid should be directed to humanitiesadmissions@uchicago.edu or (773) 702-1552.

#### Program requirements

Only courses taken for a quality grade will count toward fulfilling the requirements. No P or R grades will be accepted.

The requirements are satisfactory completion of:

- Six quarters of a Middle Eastern language (through at least two year proficiency)
- One quarter core colloquium, Approaches to the Study of the Middle East
- Three quarters of an approved integrated Middle Eastern survey course
- Seven courses in relevant electives
- One course in thesis preparation, or reading and research
- A master's thesis

The Master of Arts program (including the core methodology course and a three quarter survey course, six quarter language courses and three or four relevant electives) offers a joint degree option with the Harris School of Public Policy Studies or the Chicago Booth School of Business. A student may earn the M.P.P. in Public Policy or the M.B.A. along with the M.A. in Middle Eastern Studies in an integrated joint program that normally requires a total of three years of study.

Those with previous work in Islamic studies will be advised to substitute, where appropriate, more advanced and specialized courses in the field.

#### LANGUAGE STUDY

Placement examinations will be given so that entering students may register for courses at the appropriate level of instruction. All or part of the language requirement may be met through the placement examination.

Students who elect to study Arabic will concentrate on the modern literary language. Students who elect to study Persian, Turkish, or Hebrew will concentrate on the modern and contemporary idiom.

#### **ELECTIVES**

In consultation with advisers, students select courses providing instruction in skills related to their future careers. These courses may be in research methodology; statistics; cross cultural, demographic, or economic analysis. They may be selected from the offerings of departments in the graduate divisions, such as the Departments of Economics, Statistics, or Sociology; or of the professional schools, such as the Chicago Booth School of Business, the Law School, the Harris School of Public Policy Studies or the School of Social Service Administration.

Students are strongly encouraged to consider participating in the University Writing Program (Little Red Schoolhouse).

#### MASTER'S THESIS

Students are required to submit a master's thesis that should deal with a problem relevant to the student's intended career and should give evidence of the specialized disciplinary aspects of his or her training. The student's program adviser and a faculty member with special interest in the subject of the paper will guide the research and writing of the paper and judge whether it exhibits proof of competence in the field.

During the writing of the paper, the student will register for a thesis preparation or reading and research course. The thesis title will be listed on the student's transcript.

#### COURSES

Consult in the quarterly Time Schedules the listings of the Departments of Art History, Anthropology, English Language & Literature, History, Music, Near Eastern Languages & Civilizations, Political Science, Sociology, South Asian Languages & Civilizations, and the Committee on Geographical Studies.



### DEPARTMENT OF ART HISTORY

#### Chair

• Christine Mehring

#### **Professors**

- Charles Cohen
- Tom Gunning
- William J. T. Mitchell
- Richard Neer
- · Joel M. Snyder
- Yuri Tsivian
- Wu Hung
- Rebecca Zorach

#### Associate Professors

- Persis Berlekamp
- Matthew Jesse Jackson
- Aden Kumler
- Christine Mehring
- Katherine Taylor
- Martha Ward

#### **Assistant Professors**

- Niall Atkinson
- Claudia Brittenham
- Patrick Crowley
- · Ping Foong
- · Chelsea Foxwell
- Cécile Fromont

#### Harper Schmidt Collegiate Assistant Professor

- Heather Badamo
- Lisa Lee

#### Provost's Postdoctoral Scholar

• John López

#### **Associate Director of Visual Resources**

• Amanda Rybin

#### **Emeritus Faculty**

- Neil Harris
- Reinhold Heller
- Robert S. Nelson

- Linda Seidel
- · Barbara Stafford

#### **Visiting Professor**

• Jas' Elsner, Corpus Christi College, University of Oxford

The department offers a program for the study of the history and theory of art, leading to the degree of Doctor of Philosophy. We provide a forum for exploring the visual arts of European, Near Eastern, Asian, African, and American civilizations. The department seeks to cultivate knowledge of salient works of art, of the structures within which they are produced and used, and of the ways in which the visual environment in the broadest sense generates, acquires, and transmits meaning. We encourage the exploration of diverse approaches. Ways of addressing and analyzing the range of materials that constitute visual culture are emphasized in lectures, seminars, and workshops through the oral and written presentation of research and inquiry into specific objects, periods, and issues.

#### **ADMISSION**

A student wishing to enter the graduate program should have a sound undergraduate education in the humanities and liberal arts, preferably but not necessarily with a major in the history of art. It is highly recommended that students have usable skills in French, German, or other major languages relevant to the student's area of focus. More specific information about appropriate languages can be found on the department's website. Applicants are normally required to submit Graduate Record Examination (GRE) aptitude scores. Both applicants with a B.A. and applicants who bring an M.A. in Art History from another institution are welcome to apply for admission to the Ph.D. program. The department grants M.A. degrees but does not have an independent M.A. program.

The combined application process for admission and financial aid for all graduate programs in the Division of the Humanities is administered through the divisional office of the Dean of Students. The application and instructions, deadlines and department specific information is available online at: http://humanities.uchicago.edu/prospective/#admissions|the-application

Questions about admissions and aid should be directed to humanitiesadmissions@uchicago.edu or (773) 702-1552.

#### THE DEGREE OF DOCTOR OF PHILOSOPHY

The department sets specific requirements for language skills, course distribution, and procedures leading to the completion of a dissertation. These are worked out individually, in accordance with a student's interests, in consultation with the student's major faculty advisor and the director of graduate studies. Ordinarily they include proficiency in two foreign languages and eighteen courses, at least twelve of which are in art history, distributed between major and minor fields. These courses are taken during a two-year period and include seminars in methodology and historiography. Independent research work in the student's area of interest completes the program and guides the development of a dissertation proposal.

After completing course work, including a qualifying paper written over two quarters, the student prepares for a written examination testing knowledge in his or her major field of study and probable area of dissertation research. Successful completion of these preliminary examinations and departmental approval of the dissertation proposal qualifies the student for admission to candidacy. This identifies the final, most challenging and gratifying stage of doctoral study, the research and writing of the dissertation, an original contribution of scholarly or critical significance. Because the requirements for the programs in art history are regularly reviewed and revised, applicants should consult the departmental handbook for up-to-date statements: http://arthistory.uchicago.edu/graduate/department-handbook.

#### THE DEGREE OF MASTER OF ARTS

The objective of the program is the Ph.D. degree. Doctoral students in the program are eligible for the M.A. degree after completing the following requirements: one foreign language required for the student's field; nine one-quarter courses at the University of Chicago, which include Methodology and meet the first-year distribution requirements; and approval of the qualifying paper from both readers.

#### COURSES

For more information on recently taught courses, please see the course description page of the departmental website at: http://arthistory.uchicago.edu/courses.

#### ART HISTORY COURSES

#### ARTH 30100. The Art of Ancestral Worship. 100 Units.

For course description contact Art History.

Equivalent Course(s): ARTH 20100, EALC 24900, EALC 34900, RLST 27600

#### ARTH 30603. Image and Text in Mexican Codices. 100 Units.

,In most Mesoamerican languages, a single word describes the activities that we would call "writing" and "painting." This seminar will investigate the interrelationships between image and text in Central Mexico both before and immediately after the introduction of alphabetic writing in the 16th century. We will also review art historical and archaeological evidence for the social conditions of textual and artistic production in Mexico, and how these traditions were transformed under Spanish colonial rule. We will consider the materiality of text and image by working with facsimiles of Mesoamerican books in the Special Collections of the Regenstein Library. At the end of the course, students will have acquired a basic literacy in Aztec and Mixtec writing systems, and will have refined their ability to look productively and write elegantly about art.

Instructor(s): C. Brittenham Terms Offered: Spring

Equivalent Course(s): ARTH 20603, LACS 20603, LACS 30603

#### ARTH 31410. Advanced Theories of Sex/Gender. 100 Units.

For course description contact Art History.

#### ARTH 32004. Medieval Chinese Visual Cult. 100 Units.

Equivalent Course(s): ARTH 22204, CHIN 23206, CHIN 33206, EALC 23206

#### ARTH 32409. Late Antique Treasures. 100 Units.

Taking advantage of the opportunity afforded by the Art Institute's special exhibition of hallmarks of Late Roman and Early Byzantine art (ca. 300-600 C.E.) from the British Museum, this class will consider what treasured objects from Late Antiquity meant in their original contexts, and what they mean today in the context of the world's encyclopedic museums. We will first examine in detail works of art produced in luxurious media, primarily ivory and silver, as we discuss the various contexts in which they were seen and used—both in wealthy households and/or at important ecclesiastic sites. In so doing, we will focus on several general themes, including the continued popularity of classical imagery among the well-educated, aristocratic classes; the theater and spectacle of dining; and the ultimate emergence of a new, "Byzantine" aesthetic. Finally, we will conclude by looking at the ancient practice of burying treasure hoards, and the impact of their discovery on modern archaeology and museum practices.

Instructor(s): C. Nielsen Terms Offered: Winter

Note(s): This course will be held at the Art Institute.

Equivalent Course(s): ARTH 22409

#### ARTH 32609. Skills and Methods in Chinese Painting History. 100 Units.

This course aims to provide groundwork skills for conducting primary research in Chinese painting history. Emphasis will be on sinological tools and standard resources relevant to the study of early periods, especially the Song and Yuan Dynasty. To develop proficiencies in analyzing materials (silk, paper, mounting, ink, color) and investigating provenance (identifying seals, inscriptions). To gain familiarity with the scholarship on issues of connoisseurship, authenticity, and quality judgment. Weekly task-based reports. Final research paper.

Instructor(s): P. Foong Terms Offered: Autumn

Equivalent Course(s): ARTH 22609, EALC 20101, EALC 30101

#### ARTH 33400. Art, Architecture, and Identity in the Ottoman Empire. 100 Units.

Though they did not compose a "multi-cultural society" in the modern sense, the ruling elite and subjects of the vast Ottoman Empire came from a wide variety of regional, ethnic, linguistic, and religious backgrounds. The dynamics of the Empire's internal cultural diversity, as well as of its external relations with contemporary courts in Iran, Italy, and elsewhere, were continuously negotiated and renegotiated in its art and architecture. This course examines classical Ottoman architecture, arts of the book, ceramics, and textiles. Particular attention is paid to the urban transformation of Byzantine Constantinople into Ottoman Istanbul after 1453, and to the political, technical, and economic factors leading to the formation of a distinctively Ottoman visual idiom disseminated through multiple media in the sixteenth century.

Instructor(s): P. Berlekamp Terms Offered: Winter

Equivalent Course(s): ARTH 23400, NEAA 20801, NEAA 30801

#### ARTH 33900. Text and Image in Renaissance France. 100 Units.

This course studies manuscripts, printed books, and printed images produced in fifteenth- and sixteenth-century France that combine text and image, particularly those that do so in unusual, innovative, or provocative ways. We will consider problems of interpretation, "illustration," friction and gaps between text and image, and the uses of print vs. manuscript. Types of objects studied include emblem books, books of hours, scientific books, mythological and romance literature, captioned prints and print albums, and ceremonial books made to document events. We will visit several local collections (n.b. because of this, several class meetings will run past 4:30). Basic reading knowledge of French required.

Instructor(s): R. Zorach Terms Offered: Spring

Prerequisite(s): Some reading knowledge of French required.

Equivalent Course(s): ARTH 23900

#### ARTH 34030. Sexuality Studies in American Art. 100 Units.

Taking the recent, controversial exhibition Hide/Seek: Difference & Desire in American Portraiture as our springboard, this course examines the plural strategies by which sexuality studies (in modes ranging from feminist history to psychoanalysis to queer theory) have been brought to bear on the canon of modern American art over the past thirty years, and the ways they have refigured our investigative methods, our objects of study, and the canon itself. Treating sexuality as a multivalent force in the creation of modern art and culture (rather than merely as subject), our topics will range from the 1870s to the 1960s—the years before artistic engagements with sexuality and gender were radically transformed by postmodernism and contemporary identity politics. Case studies will include the work of, and recent scholarship about, Thomas Eakins, John Singer Sargent, the Stieglitz circle (Charles Demuth, Georgia O'Keeffe), the trans-Atlantic "New Women" of the 1920s (Berenice Abbott, Romaine Brooks), the downtown bohemian and uptown Harlem Renaissance scenes of 1920s-30s New York, Joseph Cornell, Jasper Johns & Robert Rauschenberg, Andy Warhol, and Eva Hesse. Readings are drawn from recent art historical and key theoretical texts, with an emphasis on methodological analysis.

Instructor(s): S. Miller Terms Offered: Autumn

Prerequisite(s): Any course in modern or American art history or ARTH 10100 or a course in gender studies.

Equivalent Course(s): ARTH 24030, GNSE 26102

#### ARTH 34710. Japan and the World in 19th Century Art. 100 Units.

This seminar will explore artistic interaction between Japan and the West in the late 19th century. Topics include: changing European and American views of Japan and its art, the use of Japanese pictorial "sources" by artists such as Monet and Van Gogh, Japan's invocation by decorative arts reformers, Japanese submissions to the world's fairs, and new forms of Japanese art made for audiences within Japan. Class sessions and a research project are designed to offer different geographical and theoretical perspectives and to provide evidence of how Japonisme appeared from late 19th-century Japanese points of view.

Instructor(s): C. Foxwell Terms Offered: Spring

Equivalent Course(s): ARTH 24710, EALC 24710, EALC 34710

#### ARTH 34812. Museums and Art. 100 Units.

This course considers how the rise of the art museum in the 19th and 20th centuries affected the making of modern art and the viewing of past art. It is not designed to be a survey course, but rather a historical investigation of certain issues and developments. We will concentrate on the following: what has been said to happen to objects when they are uprooted and moved into the museum; how and why museums have changed display practices so as to get viewers to look at art in new ways; what artists have understood museums to represent and how they have responded to that understanding in their work and their display preferences. Though reference will be made to the contemporary art world, the focus will be on materials and case studies drawn from the French Revolution through the 1960s. French, German, English and American museums will be featured.

Instructor(s): M.Ward Terms Offered: Autumn

Note(s): This course does not meet the general education requirement in the dramatic, musical, and visual arts.

#### ARTH 35011. Africa, America. 100 Units.

This seminar explores the dynamic exchanges in the expressive cultures of Africa and the Americas. It examines a range of visual and material traditions that emerged and grew from the sustained contact between the two continents from the era of the Atlantic Slave Trade to the present. Class discussion, readings, assignments, and museum visits address topics such as carnival performances, santería and candomblé traditions, Vodou ritual forms, Luso-African architecture on both continents, and contemporary art.

Instructor(s): C. Fromont Terms Offered: Winter

Equivalent Course(s): ARTH 25011, LACS 25011, LACS 35011

#### ARTH 35900. Theories of Media. 100 Units.

This course will explore the concept of media and mediation in very broad terms, looking not only at modern technical media and mass media, but at the very idea of a medium as a means of communication, a set of institutional practices, and a habitat" in which images proliferate and take on a "life of their own." The course will deal as much with ancient as with modern media, with writing, sculpture, and painting as well as television and virtual reality. Readings will include classic texts such as Plato's Allegory of the Cave and Cratylus, Aristotle's Poetics, and such modern texts as Marshall McLuhan's Understanding Media, Regis Debray's Mediology, and Friedrich Kittler's Gramophone, Film, Typewriter. We will explore questions such as the following: What is a medium? What is the relation of technology to media? How do media affect, simulate, and stimulate sensory experiences? What sense can we make of such concepts as the "unmediated" or "immediate"? How do media become intelligible and concrete in the form of "metapictures" or exemplary instances, as when a medium reflects on itself (films about films, paintings about painting)? Is there a system of media? How do we tell one medium from another, and how do they become "mixed" in hybrid, intermedial formations? We will also look at such recent films as *The Matrix* and *Existenz* that project fantasies of a world of total mediation and hyperreality. Students will be expected to do one "show and tell" presentation introducing a specific medium. There will also be several short writing exercises, and a final paper. (H)

Instructor(s): W. J. T. Mitchell Terms Offered: Winter

Equivalent Course(s): ENGL 12800,AMER 30800,ARTH 25900,ARTV 25400,CMST 27800,CMST 37800,ENGL 32800

#### ARTH 36609. Abstraction. 100 Units.

For course description contact Art History.

Equivalent Course(s): ARTH 26609

### ARTH 36803. Enlightenment and 19th Century Architectural Theory and Practice. 100 Units.

This course examines influential new ideas about architectural design from the Enlightenment and nineteenth century in terms of writings and related buildings in Europe and the U.S. This experimental period generated theoretical writing that continues to matter to architects today; we will study it in terms of its initial contexts and application. Major themes are: (1) the relationship of a building's structure to its decoration (or body to clothing, as it was sometimes put); (2) the rise of historical interest in older buildings from divergent stylistic traditions (e.g., classical and Gothic) and its impact on new design; (3) the development of aesthetic theory suited to mass as well as elite audiences (e.g., the sublime and the picturesque); and (4) the idea that architect and building could and should be ethical or socially reformative. Instructor(s): K. Taylor Terms Offered: Autumn

Prerequisite(s): Prior course in art history or permission of the instructor.

Equivalent Course(s): ARTH 26803

#### ARTH 36905. Movies and Madness. 100 Units.

We propose to investigate representations of madness in fictional, documentary, and experimental film. We divide the topic this way to emphasize the different dimensions of cinematic address to questions of mental illness, and the ways that film genres imply distinct formal and epistemological conventions for the representation of insanity. Documentary ranges from instructional and neutral reportage, to polemical, essayistic interventions in the politics of psychiatry and the asylum, the actual conditions of mental illness in real historical moments. Documentary also includes the tendency in new media for "the mad" to represent themselves in a variety of media. With experimental film, our aim will be to explore the ways that the cinematic medium can simulate experiences of mania, delirium, hallucination, obsession, depression, etc., inserting the spectator into the subject position of madness. We will explore the ways that film techniques such as shotmatching, voice-over, montage, and special effects of audio-visual manipulation function to convey dream sequences, altered states of consciousness, ideational or perceptual paradoxes, and extreme emotional states. Finally, narrative film we think of as potentially synthesizing these two strands of cinematic practice, weaving representations of actual, possible, or probable situations with the special effects of mad subjectivity. Our emphasis with narrative film will be to focus—not simply on the mentally ill subject as hero or monster—but on the institutional situation of madness, its place in a social and disciplinary context. Put simply, we want to consider films that portray both insanity and the sanatorium, both the deranged subject and the asylum, both the madwoman and the (often male) psychiatrist, both the irrational subject and the rational system. The overall aim of the seminar, then, is to raise the question of what movies bring to madness that was not representable in pre-cinematic media such as theater, opera, and literature, and what it was that the subject of madness brought to cinema, not only as a thematic issue but as defining possibility of film form as such. A more specific aim will be to establish a context for focusing on American Cold War movies, as well as more recent films that look back to the Cold War era, and films that directly address the anti-psychiatry movement of the 1960s. **(H)** 

Instructor(s): W. J. T. Mitchell, J. Hoffman Terms Offered: Autumn

Prerequisite(s): Third- or fourth-year standing

Equivalent Course(s): BPRO 26400, ARTH 26905, ARTV 26411, ARTV 36411, CMST

25550,CMST 35550,ENGL 28703,ENGL 38703

#### ARTH 37400. Feminism & The Visual Arts. 100 Units.

For course description contact Art History.

Equivalent Course(s): ARTH 27400, GNSE 27600, GNSE 37400

#### ARTH 37503, Modern/Postmodern, 100 Units.

For course description contact Art History.

Equivalent Course(s): ARTH 27503

#### ARTH 37610. Drawing After 1953. 100 Units.

For course description contact Art History.

Equivalent Course(s): ARTH 27610, ARTV 27910, ARTV 37910

#### ARTH 38500. History of International Cinema I: Silent Era. 100 Units.

This course introduces what was singular about the art and craft of silent film. Its general outline is chronological. We also discuss main national schools and international trends of filmmaking.

Instructor(s): J. Lastra Terms Offered: Autumn

Prerequisite(s): Prior or concurrent registration in CMST 10100 required. Required of students majoring in Cinema and Media Studies.

Note(s): This is the first part of a two-quarter course.

Equivalent Course(s): CMST 28500,ARTH 28500,ARTV 26500,ARTV 36500,CMLT 22400,CMLT 32400,CMST 48500,ENGL 29300,ENGL 48700,MAPH 36000

#### ARTH 38600. History of International Cinema II: Sound Era to 1960. 100 Units.

The center of this course is film style, from the classical scene breakdown to the introduction of deep focus, stylistic experimentation, and technical innovation (sound, wide screen, location shooting). The development of a film culture is also discussed. Texts include Thompson and Bordwell's *Film History: An Introduction*; and works by Bazin, Belton, Sitney, and Godard. Screenings include films by Hitchcock, Welles, Rossellini, Bresson, Ozu, Antonioni, and Renoir.

Instructor(s): T. Gunning Terms Offered: Winter

Prerequisite(s): Prior or concurrent registration in CMST 10100 required. Required of students majoring in Cinema and Media Studies.

Note(s): CMST 28500/48500 strongly recommended

Equivalent Course(s): CMST 28600,ARTH 28600,ARTV 26600,CMLT 22500,CMLT 32500,CMST 48600,ENGL 29600,ENGL 48900,MAPH 33700

#### ARTH 39400. Feminine Space in Chinese Art. 100 Units.

"Feminine space" denotes an architectural or pictorial space that is perceived, imagined, and represented as a woman. Unlike an isolated female portrait or an individual female symbol, a feminine space is a spatial entity: an artificial world composed of landscape, vegetation, architecture, atmosphere, climate, color, fragrance, light, and sound, as well as selected human occupants and their activities. This course traces the construction of this space in traditional Chinese art (from the second to the eighteenth centuries) and the social/political implications of this constructive process.

Instructor(s): Wu Hung Terms Offered: Spring

Equivalent Course(s): EALC 27708, EALC 37708, ARTH 29400

#### ARTH 39503. Mexican Murals. 100 Units.

This course examines three vital moments of mural production in Mexico: ancient, colonial, and modern. We will begin by looking at indigenous Mesoamerican wall painting traditions of Teotihuacan, the Maya, Cacaxtla, and the Aztecs, and then consider how these traditions were transformed by the encounter with Spanish colonialism to provide decoration for the walls of monastic churches. Finally, we will examine the modern Mexican muralist movement, looking at the work of Diego Rivera, José Clemente Orozco, David Alfaro Siqueiros, and others, with a particular focus on Rivera's murals at the Detroit Institute of Arts. Throughout the course, we will consider mural paintings in relationship to architecture and other media, paying special attention to the different methodologies and kinds of evidence that have been used to interpret these works. The course will also focus on developing research, writing, and presentation skills.

Instructor(s): C. Brittenham Terms Offered: Winter

Equivalent Course(s): LACS 29503, LACS 39503, ARTH 29503

#### ARTH 40610. Democratic Athens. 100 Units.

For course description contact Art History. Equivalent Course(s): ANCM 40609,CLAS 40609

#### ARTH 42010. Art and Neoplatonism, East and West. 100 Units.

For course description contact Art History.

#### ARTH 42610. Imperial Collections of Chinese Painting & Calligraphy. 100 Units.

For course description contact Art History.

Equivalent Course(s): EALC 42610

#### ARTH 43002. The Face on Film. 100 Units.

The seminar will discuss on the workings of the face—as imprint of identity, as figure of subjectivity, as privileged object of representation, as mode and ethic of address—through film theory and practice. How has cinema responded to the mythic and iconic charge of the face, to the portrait's exploration of model and likeness, identity and identification, the revelatory and masking play of expression, the symbolic and social registers informing the human countenance. At this intersection of archaic desires and contemporary anxieties, the face will serve as our medium by which to reconsider, in the cinematic arena, some of the oldest questions on the image. Among the filmmakers and writers who will inform our discussion are Balázs, Epstein, Kuleshov, Dreyer, Pasolini, Hitchcock, Warhol, Bresson, Bazin, Barthes, Doane, Aumont, Nancy, Didi-Huberman, and others.

Instructor(s): Noa Steimatsky Terms Offered: Spring Equivalent Course(s): CMLT 43002,CMST 63002

#### ARTH 43500. Italian Ren Drawing. 100 Units.

For course description contact Art History.

#### ARTH 43701. Neo-Avant-Wave: Post-War Film Experiment in France. 100 Units.

The New Wave. The Neo-Avant Garde. Rarely have these film and art movements been placed into an explicit historical or theoretical dialog or dialectic. It will be the task of this seminar to do just that. We will begin our study with a brief look into the pre-WWII situation of radical art and film movements, and classic theories of the avant-garde and neo-avant-garde. Turning our attention to the rise of Lettrism within the context of post-war film and art culture, we will subsequently evaluate the conditions that surrounded the emergence of New Wave filmmaking and criticism, and that include the Situationist International and Nouveau Réalisme. As we move toward and beyond the events of May 1968, we will bring our study of social documentary, politically militant forms, collective film and art practices, and historiography to bear on purportedly stable understandings of the New Wave, its art historical forebearers, and its heirs. Reading knowledge of French is required. While some of our texts will appear in English translation, many will not. The seminar will be conducted in English, but the last thirty minutes of each session will be conducted in French. This component is intended to improve students' oral proficiency, but it will not be used in student evaluation. Screenings are mandatory. With some possible exceptions, films will be subtitled. Students enrolled in FREN 43713 will be required to complete all reading and writing in French.

Instructor(s): Jennifer Wild Terms Offered: Winter Equivalent Course(s): FREN 43713,CMST 63701

#### ARTH 44909. Seminar: Japanese Handscroll Paintings. 100 Units.

For course description contact Art History.

Equivalent Course(s): EALC 42609

#### ARTH 45202. The Uncanny in Cinema. 100 Units.

The uncanny is an experience or quality that by definition remains difficult to grasp: something that is mysterious and enigmatic, yet also seems oddly familiar. To explore this term this seminar will draw largely on a tradition of commentary on the German word Das Unheimliche, usually translated as uncanny, that can be trace among Ernst Jentsch, Sigmund Freud and Martin Heidegger and it relevance to film and media studies. Freud and his disciple Otto Rank before 1920 related the uncanny to the cinema, and cinema's ability to evoke the uncanny has been frequently observed. On the one hand, the cinema's ability to portray uncanny events (as in Rank and Freud's invocation of the 1913 film The Student of Prague) appears generically in films of fantasy or horror. In addition, some theorists have felt that film as a medium could be best approached via the uncanny. In this seminar we will read a series of the keys texts and try to survey the terrain of the concept of the uncanny. We will screen films that evoke the experience through their narrative and stylistics, and we will discuss the usefulness of the term for theorizing both film and electronic media, both new and old.

Instructor(s): Tom Gunning Terms Offered: Autumn

Equivalent Course(s): CMST 65202

#### ARTH 46210. Arabesque Narrative: A Hybrid Form of the Imaginary. 100 Units.

For course description contact CDIN Center for Disciplinary Innovation.

Equivalent Course(s): CDIN 51400,GRMN 51400,SCTH 51400

#### ARTH 46309. Secularization & Resacralization of the Work of Art. 100 Units.

For course description contact Art History.

Equivalent Course(s): SCTH 40106

#### ARTH 49309. Race, Media and Visual Culture. 100 Units.

For course description contact CDIN Center for Disciplinary Innovation. Equivalent Course(s): CDIN 51300,ARTV 55500,CMLT 51500,CMST 51300,ENGL 51300



# DEPARTMENT OF CINEMA AND MEDIA STUDIES

#### CORE FACULTY

#### Chair

 Robert Bird, Department of Slavic Languages and Literatures, Department of Cinema and Media Studies, and the College

#### **Professors**

- James Chandler, Barbara E. and Richard J. Franke Distinguished Service Professor, Department of English, Department of Cinema and Media Studies, Committee on the History of Culture, and the College
- Tom Gunning, Edwin A. and Betty L. Bergman Distinguished Service Professor, Department of Art History, Department of Cinema and Media Studies, and the College
- David Levin, Professor, Department of Germanic Studies, Department of Cinema and Media Studies, the Committee on Theater and Performance Studies, and the College
- Richard Neer, William B. Ogden Distinguished Service Professor in Art History, Cinema and Media Studies and the College
- David Rodowick, Department of Cinema and Media Studies, and the College
- Jacqueline Stewart, Department of Cinema and Media Studies, and the College
- Yuri Tsivian, William Colvin Professor, Department of Art History, Department of Slavic Languages and Literatures, Department of Comparative Literature, Department of Cinema and Media Studies, and the College
- Rebecca West, William R. Kenan, Jr. Distinguished Service Professor, Department of Romance Languages and Literatures, Department of Cinema and Media Studies, and the College

#### **Associate Professors**

- Robert Bird, Department of Slavic Languages and Literatures, Department of Cinema and Media Studies, and the College
- James Lastra, Department of Cinema and Media Studies, Department of English Language and Literature, and the College
- Rochona Majumdar, Department of Cinema and Media Studies, Department of South Asian Languages and Civilizations, and the College
- Daniel Morgan, Department of Cinema and Media Studies, and the College
- Noa Steimatsky, Department of Cinema and Media Studies and the College Assistant Professors
- Xinyu Dong, Department of Cinema and Media Studies and the College; affiliated faculty at the Center for East Asian Studies
- Jennifer Wild, Department of Cinema and Media Studies, Department of South Asian Languages and Civilizations, and the College

Professors of Practice

- Judy Hoffman Lecturers
- Dominique Bluher
   Visiting Faculty & Scholars
- · Eivind Rossaak, Visiting Associate Professor

#### AFFILIATED FACULTY

- Paola Iovene, Assistant Professor in Chinese Literature, East Asian Languages and Civilizations
- Patrick Jagoda, Assistant Professor, Department of English Language and Literature and the College
- Loren Kruger, Professor, Department of English Language and Literature and the College
- Laura Letinsky, Professor, Department of Visual Arts and the College
- Joel Snyder, Professor, Department of Art History and the College
- Catherine Sullivan, Assistant Professor, Department of Visual Arts and the College

#### STAFF

- Matt Wallace, Department Coordinator
- Joy Miller, Department Assistant

#### The Graduate Program in Cinema and Media Studies

The Department of Cinema and Media Studies offers a Ph.D. program that focuses on the history, theory, and criticism of film and related media. Faculty are drawn from a wide range of departments and disciplines, primarily in the humanities. In addition to offering its own doctoral degree, the Department offers courses and guidance to students who specialize in film and related media within other graduate programs or who pursue a joint degree.

Centering on the cinema, the graduate program provides students with the critical skills, research methods, and an understanding of the debates that have developed within cinema studies as a discrete discipline. At the same time, the study of cinema and related media mandates an interdisciplinary approach in a number of respects. The aesthetics of film is inextricably linked to the cultural, social, political, and economic configurations within which the cinema emerged and which it in turn has shaped. Likewise, the history of the cinema cannot be separated from its interaction with other media. Just as it is part of a wholly new culture of moving images and sounds that includes television, video, and digital technologies, the cinema draws on earlier practices of instantaneous photography and sound recording and, in a wider sense, those media that are more often described as the fine arts (painting, sculpture, architecture, literature, theater, and music). Finally, the interdisciplinary orientation of the program entails an emphasis on the diversity of film and media practices in different national and transnational contexts and periods and thus an understanding of the cinema as a historically variable and rich cultural form.

The Film Studies Center, located on the third floor of Cobb Hall, serves as a resource for course related and individual research and as a forum for cinema and media related activities.

#### THE DEGREE OF DOCTOR OF PHILOSOPHY

Students are expected to complete sixteen courses during their course of study, of which a minimum of eleven have to be listed among the offerings of the Department of Cinema and Media Studies. These Cinema and Media Studies courses will include:

- 1. Three required courses originating in the department:
  - : an introduction to research methods, key concepts, and theoretical approaches, using case studies to introduce students to debates and issues in the field.
  - CMST 48500 History of International Cinema I: Silent Era, and CMST 48600
     History of International Cinema II: Sound Era to 1960: a two quarter survey
     course that is designed as both a beginning level graduate and an upper
     level undergraduate course.
- 2. Eight elective courses in the Department of Cinema and Media Studies.

A sample program for students entering the department without previous graduate study in cinema and media studies would consist in the following:

- First year: A total of seven courses; the three required courses, a minimum of two
  elective courses in the Department of Cinema & Media Studies, and two further
  elective courses.
- Second year: A total of six courses; a minimum of four elective courses in the Department of Cinema and Media Studies, and two further elective courses. Of these six courses, three must be designated as advanced courses.
- Third year: A total of three courses; at least one Ph.D. research seminar in the Department of Cinema and Media Studies, and two elective courses.

Students entering the program with an M.A. from another institution or another program may ask to be exempt from some of these requirements. Such requests will be handled on an individual basis. Students wishing to waive requirements must get the approval of their adviser and the Director of Graduate Studies.

#### FIELDS EXAMINATION

Students entering the program without previous graduate study in Cinema and Media Studies are expected to take their fields examination by the end of the third year; students entering with an M.A. may be encouraged to take the examination earlier. All candidates for the Ph.D. in Cinema and Media Studies must complete comprehensive examinations after completing the required course work.

- 1. The exam will be comprised of two parts: a written exam, and an oral defense. The student will select the exam committee in consultation with the graduate adviser.
- 2. The written exam will be comprised of three (3) equally weighted areas defined by three "lists" covering three areas of study.

- These areas will be defined by generally canonical criteria: genre, period, nationality, movements, etc., but are not prescribed by the department.
- Alternately, one area may be defined by the student as a way of tailoring a list to a special research interest.
- CMS faculty will supervise the development of the lists to ensure that central texts are not omitted, that the lists cover an appropriate range of materials, including films, and that a balance of issues, periods, debates, etc. are engaged by the student. At least two members of the exam committee must be department members.
- Each list will include approximately 30 "items." An item is a flexible unit that may be a book, a group of articles, a group of films, or, at times, a single [substantial] work the number and nature of an "item" will be negotiated between faculty member and student.
- To ensure consistency, all lists will be approved by the chair or designated faculty delegate. At least four weeks prior to the scheduled exam, the student should return a completed approval form and a copy of the approved lists to the Cinema and Media Studies office, Gates-Blake 418. Approval forms are available from the CMS office an on the CMS website. Essay questions will be prepared by the faculty in advance of the written exam date.
- 3. The student will determine the sequence in which the written exam will be administered, specifying which list will comprise the first portion of the exam, which the second, and which the third. At 9:00 a.m. on a mutually selected date the student will pick up the first question or questions of the written exam. The student will return the completed essay by 5:00 p.m. the next day. The student may pick up the remaining two portions of the exam at 9:00 a.m. on subsequent days, at his or her own pace, returning the exams the next day, by 5:00 p.m. The student will finish the written exam no later than two weeks after the starting date.
- 4. At the time of the written exam, the student will turn in a sample syllabus for a course based upon one or more of the lists. The syllabus will be discussed as part of the oral defense.
- 5. The faculty committee and the student will meet for an oral defense shortly after the written exam has been completed. Faculty will have evaluated the written portion, and will come with questions that respond to the written work. However, other aspects of the list will be considered fair game. The oral exam will last approximately 1.5 hours.

#### FOREIGN LANGUAGE REQUIREMENT

Given the highly international nature of the field of cinema and media studies, proficiency in two modern foreign languages has to be demonstrated by earning High Passes on the University's Foreign Language Reading Examinations. The first of these two languages must be either French or German, and proficiency should be demonstrated by the beginning of the Autumn quarter of the student's second year. The second language will be chosen in consultation with the graduate advisor, and

proficiency must be demonstrated before the student will be permitted to take the Fields Examination.

#### **TEACHING**

We will make every effort to assure that all students who apply for a course assistantship have at least one quarter of supervised teaching during their years in the program, and more if specified by the terms of their award package. Further information on teaching in CMS and other opportunities to teach at the University of Chicago can be found in the CMS Graduate Student Handbook and be obtained from the Office of the Dean of Students.

#### DISSERTATION PROPOSAL

Before being admitted to candidacy, students must write a dissertation proposal under the supervision of the dissertation committee.

#### DISSERTATION

Upon completion of the dissertation, the student will defend it orally before the members of the dissertation committee.

For further information concerning Cinema and Media Studies, please see http://cms.uchicago.edu or contact the Department Coordinator at (773) 834-1077 or via e-mail at cine-media@uchicago.edu.

#### Application and Financial Aid

The application process for admission and financial aid for all graduate programs in the Division of the Humanities is administered by the Divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online at: http://humanities.uchicago.edu/prospective/admissions.html.

Questions about admissions and aid should be directed to humanitiesadmissions@uchicago.edu or (773) 702-1552.

#### COURSES

The following list represents courses that the department plans to offer during the 2013-2014 academic year. For up-to-date information about course offerings, please visit the department's courses page at http://cms.uchicago.edu/courses.

#### CMST 33405. A Topography of Modernity: Cinema in Paris, 1890-1925. 100 Units.

In the *Arcades Project*, Walter Benjamin wrote: "Couldn't an exciting film be made from the map of Paris? From the unfolding of its various aspects in temporal succession? From the compression of a centuries-long movement of streets, boulevards, arcades, and squares into the space of half an hour?" In this course, we will undertake a study of modernity as both a philosophical concept and historical phenomenon by focusing on film style, cinema culture, film exhibition practices, and the visual culture and urban milieu of Paris—"the capital of the 19th century"—between 1890 and 1925. Knowledge of French is desirable, but not required.

Instructor(s): J. Wild Terms Offered: Spring

Prerequisite(s): PQ: CMST 10100 Introduction to Film or consent of instructor.

Equivalent Course(s): CMST 23405

#### CMST 33700. La Nouvelle Vague/The French New Wave. 100 Units.

Neither a coherent movement nor a precise style, La Nouvelle Vague was nonetheless a watershed moment in the history of modernism. In this course, we will study the French New Wave's emergence from the context of post–World War II modernization and Existentialism, cinephilia, film criticism, and theory. With an examination of canonical and lesser-known films (1950–early 1970s), we will pursue our study from the standpoint of cinematic ontology and French cultural and political history. We shall explore how this cinema considerably expanded the parameters of modern art practice and intellectual thought as well as redirected assumptions surrounding the medium's formal and philosophic capacities. Films by Rohmer, Rivette, Truffaut, Godard, Eustache, Varda, Raynal, Chabrol, Rouch, Resnais, Garrel, and others.

Instructor(s): J. Wild Terms Offered: Winter

Prerequisite(s): PQ: CMST 10100 Introduction to Film or consent of instructor.

Equivalent Course(s): FREN 29112, CMST 23700

#### CMST 33905. Creative Thesis Workshop. 100 Units.

This seminar will focus on how to craft a creative thesis in film or video. Works-in-progress will be screened each week, and technical and structural issues relating to the work will be explored. The workshop will also develop the written portion of the creative thesis. The class is limited to seniors from CMS and DOVA, and MAPH students working on a creative thesis.

Instructor(s): Judy Hoffman Terms Offered: Autumn, Winter

Prerequisite(s): CMST 23930; CMST 23931 or 27600; departmental approval of senior creative thesis project.

Equivalent Course(s): ARTV 23905, ARTV 33905

#### CMST 33931. Documentary Production II. 100 Units.

This course focuses on the shaping and crafting of a nonfiction video. Students are expected to write a treatment detailing their project. Production techniques focus on the handheld camera versus tripod, interviewing and microphone placement, and lighting for the interview. Postproduction covers editing techniques and distribution strategies. Students then screen final projects in a public space.

Instructor(s): J. Hoffman

Prerequisite(s): CMST 23930/ARTV 23930

Equivalent Course(s): CMST 23931,ARTV 23931,ARTV 33931

### CMST 34614. Three New Waves: Hong Kong, Taiwan, and Mainland China. 100 Units.

Like all New Waves, Chinese New Waves are first and foremost an international event. From the late 1970s on and throughout the 1980s, three "New Wave" cinemas from Hong Kong, Taiwan, and Mainland China appeared on the international stage, representing the historical debut of Chinese-language cinema to world cinephiles. This course will investigate how such "universal" New Wave issues as their stylistic treatment of youth, city, and violence engage with historical local experiences. Films include major works by such important New Wave directors as Ann Hui, Wong Karwai, Hou Hsiao-hsien, Edward Yang, Chen Kaige, and Zhang Yimou.

Instructor(s): X. Dong Terms Offered: Autumn

Prerequisite(s): PQ: CMST 10100 Introduction to Film or consent of instructor.

Equivalent Course(s): CMST 24614

#### CMST 34615. Chinese Musicals. 100 Units.

Are there Chinese musicals? It very much depends on what we would consider a Chinese musical. To answer Adrian Martin's call for "Musical Mutations: Before, Beyond and Against Hollywood," this course will look for Chinese musicals in both obvious and unlikely places. The "musical mutations" under discussion include traditional opera adaptation, back-stage opera film, martial-arts opera film, Maoist opera film, musical comedy, song-and-dance film, melo-drama, Hong Kong musical, and most certainly the "apocalyptic" musical named by Martin, *The Hole* (Tsai Mingliang, 1998). The tripartite developments of Chinese-language cinemas provide a privileged site to chart the ways the musical genre expands, transforms, and rejuvenates across time and borders.

Instructor(s): X. Dong Terms Offered: Winter

Prerequisite(s): PQ: CMST 10100 Introduction to Film or consent of instructor.

Equivalent Course(s): CMST 24615

#### CMST 35520. Horror Survey. 100 Units.

Description forthcoming.

Instructor(s): J. Lastra Terms Offered: Winter

Equivalent Course(s): CMST 25520

#### CMST 36402. Post-World War II American Mise en Scene Directors. 100 Units.

This course will treat the style of a number of American Hollywood feature film directors during the two decades after World War II, including Nicholas Ray, Anthony Mann, Otto Preminger, and others. These directors were singled out at that time by the critics writing for the French journal *Cahiers du Cinema* as auteurs, directors with a consistent style. Critics in France, England, and the USA used the term mise en scene to discuss their use of framing, performance, editing, and camera movement and especially their use of new technologies such as wide screen and color. This course will explore the concept of directors' style as well as the mode of close analysis criticism that grew out of this concept.

Instructor(s): T. Gunning Terms Offered: Spring

 $Prerequisite (s): PQ: CMST\ 10100\ Introduction\ to\ Film\ or\ consent\ of\ instructor.$ 

Equivalent Course(s): CMST 26402

#### CMST 36503. Scandinavian Cinema in the Classic Era (1910-1960) 100 Units.

During the 1910s Scandinavian cinema was among the most popular cinemas in the world. The best directors, actresses, and actors developed a mastery of cinematic expression and screen appearance never seen before in cinema. Erotically charged melodramas and comedies were the most popular genres, but also poetic masterpieces such as *The Passion of Joan of Arc* are key works from this era. The course will explore the breathtaking appearances of such celebrated female stars as Asta Nielsen and Greta Garbo, and analyze silent masterpieces such as Blom's early science fiction films, the dramas of Christensen, Stiller, Sjostrom, and Dreyer, and the early films of Tancred Ibsen and Ingmar Bergman. All readings are in English. Instructor(s): E. Rossaak Terms Offered: Autumn

Prerequisite(s): PQ: CMST 10100 Introduction to Film or consent of instructor.

Equivalent Course(s): CMST 26503

#### CMST 37204. Realisms. 100 Units.

The course will examine key genealogies, theoretical debates, and critical accounts of realism in the cinema. Questions of realism have been carried over from the "traditional" arts and literature, but had undergone a sea-change with the particular ontological and epistemological claims of the cinematic medium, across fiction and documentary, mainstream and experimental forms. While the concept seemed bracketed (or buried) with the advent of structuralism and post-modernism, reality effects—traversing types, genres, and ideologies of representation—still haunt the cinematic imagination. The claim to "presence" carried by photographic indexicality, the historical conventions of mimesis and illusionism, the shifting values of document, witness, testimony, of the material and the referential, of the authentic and the composed—all ensured the continued fascination with realism and its productive transfigurations through our time. We will explore examples from different cinemas and cultural moments, and consider debates on the political implications of realism and its capacity for transformation and revival.

Instructor(s): Noa Steimatsky Terms Offered: Autumn

Prerequisite(s): PQ: CMST 10100 Introduction to Film or consent of instructor.

Equivalent Course(s): CMST 27204

#### CMST 38304. Absorption/Distanciation: Wagner, Brecht, Kluge. 100 Units.

Explores Richard Wagner's music-dramas, Bertolt Brecht's plays, and Alexander Kluge's films as a forum for the formulation, circulation, and contestation of absorption and distanciation. While a conventional historical account would map the tensions between absorption and distanciation as a one-way trip, moving from absorption (in Wagner) to distanciation (as coined by Brecht) to distraction (as deployed by Kluge), we will explore how each artist deploys each term to varying effects. Works to be considered include Wagner's *The Flying Dutchman* and *Parsifal*, Brecht's *Man Is Man* and *The Measures Taken*, and Kluge's *Yesterday Girl* and *The Power of Emotions*. Readings by each artist, as well as by Theodor Adorno, Walter Benjamin, Michael Fried, Miriam Hansen, Andreas Huyssen, and Gertrud Koch. In English.

Instructor(s): D. Levin Terms Offered: Winter

Equivalent Course(s): GRMN 33914,CMST 28304,TAPS 28439,MUSI 29614,MUSI 33914.GRMN 29614

#### CMST 40000. Methods and Issues in Cinema Studies. 100 Units.

This course offers an introduction to ways of reading, writing on, and teaching film. The focus of discussion will range from methods of close analysis and basic concepts of film form, technique and style; through industrial/critical categories of genre and authorship (studios, stars, directors); through aspects of the cinema as a social institution, psycho-sexual apparatus and cultural practice; to the relationship between filmic texts and the historical horizon of production and reception. Films discussed will include works by Griffith, Lang, Hitchcock, Deren, Godard.

Instructor(s): Staff Terms Offered: Autumn Equivalent Course(s): ENGL 48000,MAPH 33000

#### CMST 48500-48600. History of International Cinema I-II.

This sequence is required of students majoring in Cinema and Media Studies. Taking these courses in sequence is strongly recommended but not required.

#### CMST 48500. History of International Cinema I: Silent Era. 100 Units.

This course introduces what was singular about the art and craft of silent film. Its general outline is chronological. We also discuss main national schools and international trends of filmmaking.

Instructor(s): J. Lastra Terms Offered: Autumn

Prerequisite(s): Prior or concurrent registration in CMST 10100 required.

Required of students majoring in Cinema and Media Studies.

Note(s): This is the first part of a two-quarter course.

Equivalent Course(s): CMST 28500,ARTH 28500,ARTH 38500,ARTV 26500,ARTV 36500,CMLT 22400,CMLT 32400,ENGL 29300,ENGL 48700,MAPH 36000

### CMST 48600. History of International Cinema II: Sound Era to 1960. 100 Units.

The center of this course is film style, from the classical scene breakdown to the introduction of deep focus, stylistic experimentation, and technical innovation (sound, wide screen, location shooting). The development of a film culture is also discussed. Texts include Thompson and Bordwell's *Film History: An Introduction;* and works by Bazin, Belton, Sitney, and Godard. Screenings include films by Hitchcock, Welles, Rossellini, Bresson, Ozu, Antonioni, and Renoir

Instructor(s): T. Gunning Terms Offered: Winter

Prerequisite(s): Prior or concurrent registration in CMST 10100 required.

Required of students majoring in Cinema and Media Studies.

Note(s): CMST 28500/48500 strongly recommended

Equivalent Course(s): CMST 28600,ARTH 28600,ARTH 38600,ARTV 26600,CMLT 22500,CMLT 32500,ENGL 29600,ENGL 48900,MAPH 33700

#### CMST 48600. History of International Cinema II: Sound Era to 1960. 100 Units.

The center of this course is film style, from the classical scene breakdown to the introduction of deep focus, stylistic experimentation, and technical innovation (sound, wide screen, location shooting). The development of a film culture is also discussed. Texts include Thompson and Bordwell's *Film History: An Introduction*; and works by Bazin, Belton, Sitney, and Godard. Screenings include films by Hitchcock, Welles, Rossellini, Bresson, Ozu, Antonioni, and Renoir.

Instructor(s): T. Gunning Terms Offered: Winter

Prerequisite(s): Prior or concurrent registration in CMST 10100 required. Required of students majoring in Cinema and Media Studies.

Note(s): CMST 28500/48500 strongly recommended

Equivalent Course(s): CMST 28600,ARTH 28600,ARTH 38600,ARTV 26600,CMLT 22500,CMLT 32500,ENGL 29600,ENGL 48900,MAPH 33700

#### CMST 65510. Cinemas of Immersion. 100 Units.

Description forthcoming.

Instructor(s): J. Lastra Terms Offered: Winter

#### CMST 67203. Seminar in Contemporary Film Theory. 100 Units.

This course will read and discuss the body of film theory that emerged after 1960, beginning with the work in film semiology of Christian Metz, through the theorists of the sixties that David Rodowick includes under the term "political modernism;" the theorist associated with <a href="Screen">Screen</a> (such as Stephen Heath) and their debates with the Post Theorists such as Bordwell and Carroll, the work of Stanley Cavell on film, and ending with a consideration of Giles Deleuze and his <a href="Cinema">Cinema</a> books.

Instructor(s): T. Gunning Terms Offered: Autumn

#### CMST 67210. Poetics and Rhetoric of Cinema. 100 Units.

Description forthcoming.

Instructor(s): N. Steimatsky Terms Offered: Spring

#### CMST 67410. Cinema and Comedic Modernism. 100 Units.

Description forthcoming.

Instructor(s): X. Dong Terms Offered: Spring

#### CMST 69300. Network Aesthetics | Network Cultures. 100 Units.

In the mid-twentieth century, the network emerged as a dominant structure and prevailing metaphor of our globalizing world. In recent years, across various disciplines, networks have been used to describe cellular structures, viral ecologies, terrorist organizations, economic markets, social communities, and, most of all, the Internet. In this course, we turn a critical eye to the network structure and try to determine what is at stake in claiming that everything is interconnected. In this seminar, we explore what happens when we imagine things as networks. How does this paradigm shift affect art, narratives, philosophy, politics, and archival thought? What is the explanatory power of networks? What is the longer history of networked media? How do networks shape the digital humanities? In our turn to network aesthetics, we propose to explore the effect of networks on both narrative and procedural forms, including novels, films, electronic fictions, videogames, and new media art. In our turn to network culture, we will delve into theories that may include the work of Albert-Laszlo Barabasi, Manuel Castells, Wendy Chun, Gilles Deleuze and Félix Guattari, Alexander Galloway, Bruno Latour, Bernhard Siegert, Tiziana Terranova, and others. In addition to regular blog posts and a conference paper, we will explore networked digital environments and experiment with new media methods throughout the quarter.

Instructor(s): Patrick Jagoda and Eivind Rossaak Terms Offered: Autumn 2013 Note(s): MA students require consent of instructor.



### DEPARTMENT OF CLASSICS

#### Chair

• Alain Bresson

#### **Professors**

- Clifford Ando
- Elizabeth Asmis
- Shadi Bartsch-Zimmer
- Alain Bresson
- Christopher A. Faraone
- Jonathan M. Hall
- Michèle Lowrie
- James M. Redfield
- · Peter White

**Associate Professors** 

- Michael I. Allen
- · Helma J. Dik
- · David G. Martinez
- Mark Payne
- David L. Wray

**Assistant Professors** 

Sarah Nooter

**Emeritus Faculty** 

- Walter R. Johnson
- D. Nicholas Rudall

Affiliated Faculty

- · Agnes Callard, Philosophy
- Tamara Chin, Comparative Literature
- Michael Dietler, Anthropology
- Jas' Elsner, Art History
- · Elizabeth Gebhard, Director of Excavations, Isthmia
- · Cameron Hawkins, History
- Janet Johnson, Near Eastern Languages and Civilizations
- Walter Kaegi, History
- Gabriel Richardson Lear, Philosophy
- Bruce Lincoln, Divinity School
- Boris Maslov, Comparative Literature
- · Glenn Most, Committee on Social Thought
- Richard Neer, Art History

- Martha Nussbaum, Philosophy and Law
- Wendy Olmsted, Humanities
- Dennis Pardee, Near Eastern Languages and Civilizations
- James Redfield, Committee on Social Thought
- Seth Richardson, Near Eastern Languages and Civilization
- Kent Rigsby, Emeritus, Duke University
- Robert Ritner, Near Eastern Languages and Civilization
- Martha Roth, Near Eastern Languages and Civilizations
- David Schloen, Near Eastern Languages and Civilizations
- Andrea Seri, Near Eastern Languages and Civilization
- · Laura Slatkin, Committee on Social Thought
- Jonathan Z. Smith, Humanities
- Jeffrey Stackert, Divinity School
- Matthew Stolper, Near Eastern Languages and Civilizations
- Christopher Woods, Near Eastern Languages and Civilization
- Theo van den Hout, Near Eastern Languages and Civilizations

The **Department of Classics** offers advanced study in the civilizations of the ancient Mediterranean, including literature and literary theory, history, philosophy, religion, science, art, and archaeology. The programs of the department lead to the Ph.D. degree and seek to prepare students for careers in teaching and research. They allow students to explore areas with which they are unfamiliar, as well as to strengthen their knowledge in those in which they have already developed a special interest.

The Classics faculty consists of active scholars, expert in one or more areas of classical studies. Apart from their influence through books and articles, the faculty has long been identified with the publication of *Classical Philology*, one of the leading journals devoted to classical antiquity. The diverse graduate student body at the University include students in a number of programs outside the Department of Classics who are also engaged in the study of the ancient world. The Oriental Institute, the Divinity School, the Committee on Social Thought, and the Departments of Art History, History, Linguistics, and Near Eastern Languages & Civilizations all have programs that focus on aspects of the classical period. The workshops supported by the Council for Advanced Studies, where graduate students, faculty, and visiting scholars present work in progress, are a further means of scholarly collaboration and training. The department currently sponsors workshops entitled Ancient Societies, Metaphor, Rhetoric and Poetics, and Ancient Philosophy, which involve participants from other areas as well.

#### RESEARCH AND LIBRARY RESOURCES

The library system of the University contains over six million volumes. Classics has been one of the strongest parts of this collection since its first formation in 1891, when the University purchased the entire stock of an antiquarian bookstore in Berlin that specialized in classical philology, archaeology, and science. Apart from

current monographs, the library receives more than seven hundred serials devoted to ancient Greece and Rome and subscribes to the full range of electronic databases useful to ancient studies. May of these are available off-site to members of the university community via proxy server. Major editions of classical texts printed from the Renaissance through the eighteenth century are available in the Department of Special Collections, which also houses collections of Greek and Latin manuscripts and a large reference library devoted to paleography, manuscript catalogues, and facsimiles.

#### **FELLOWSHIPS**

Students admitted to doctoral study are typically awarded a five-year fellowship package that includes full tuition, academic year stipends, summer stipends, and medical insurance. Teaching training is a vital part of the educational experience at the University, so all fellowships include a required teaching component. Graduate students may also apply for fellowships which aid students during the writing of Ph.D. dissertations and for travel grants that support visits to libraries, collections, and archaeological research sites in Europe and the Near East.

#### **TEACHING OPPORTUNITIES**

At the University of Chicago, graduate students have a variety of teaching opportunities including as independent instructors. The Center for Teaching and Learning conducts a series of workshops and forums designed for graduate students to build skills in lecturing, leading discussions, and focusing writing assignments. The Little Red Schoolhouse, a nationally famous writing program, prepares graduate students to teach writing to undergraduate students.

Teaching opportunities lie in four areas. The first is in classics, where students who have completed the first two years of coursework may apply to serve as course assistants alongside regular faculty in the beginning Greek and Latin and ancient civilization sequences. Experienced course assistants may apply to teach independently in the first or second year language courses. Graduate students also have a broad role in the summer Greek and Latin Institute, and in the Graham School of General Studies, for which they are encouraged to offer courses of their own design (some recent courses have been devoted to the *Iliad, the Odyssey,* and *the Aeneid*).

The second area of teaching is through the Writing Program. The program offers three kinds of renewable teaching positions: Lectors in Academic and Professional Writing, Writing Interns in the Humanities Common Core, and Writing Tutors for the College Tutoring Program. All Writing Program instructors take a quarter-long course in the pedagogy of writing before they start teaching, and during their first quarter of teaching, they work closely with experienced writing program personnel as writing interns in the humanities and social sciences core courses of the College.

A third area of teaching is serving as the graduate assistant for the College's tenweek Study Abroad program in Athens, which is regularly staffed by faculty from the Classics Department. The graduate assistant serves as both a course assistant and a resident assistant and as an instructor for a course entitled Readings in Attic Greek.

Finally, at the most advanced level, graduate students are eligible to teach sections of the humanities core sequence. All teaching is remunerated proportional to the teaching responsibility and normally includes remission of tuition.

#### PROGRAMS OF STUDY

The department offers Ph.D. degrees in Classical Languages and Literatures, the Ancient Mediterranean World, and Ancient Greek and Roman Philosophy, as well as a joint Ph.D. in Social Thought and Classics.

## Ph.D. Program in Classical Languages and Literatures

The curriculum in Classical Languages and Literatures emphasizes excellence in the Greek and Latin languages and training for scholarly investigation. Various kinds of courses are offered to meet the students' needs and desires. Some are devoted to the reading of texts, with emphasis on the linguistic structure. Others stress literary, historical, or philosophical interpretation. Several seminars each year, which deal with Greek and Latin texts and are often related to current research interests of the faculty, invite students to think deeply about an aspect of antiquity and provide training in the writing of scholarly research papers. A synoptic view is furnished by a two quarter sequence devoted in alternate years to Greek and to Latin literature. These survey courses are designed to help the student acquire skill in the rapid reading of Greek and Latin. Students may also pursue individual interests by taking courses offered outside the department, and may, in special circumstances, arrange for independent study.

Applicants to the Program in Classical Languages & Literatures should have a strong background in Greek and Latin. Students with undergraduate degrees in other fields are encouraged to apply if their scholarly interests lie in classics and if they have begun intensive study to make up any deficiencies in Greek and Latin. All graduate students are expected to demonstrate proficiency in reading French and German, one language for the A.M. degree and the second for the Ph.D.; entering students should have begun this preparation if they are not already competent.

The Ph.D. Program in Classical Languages and Literatures is designed for six years, the first two being devoted to a full load of nine courses, the third and fourth to preparing for comprehensive examinations, and the final two to the dissertation.

In the first year of the Classical Languages and Literatures program, students regularly take one of the survey courses, a prose composition course, two seminars, at least two courses in the minor language, and other courses (often in other departments such as Art History, Linguistics, Near Eastern Languages & Civilizations, etc.) to meet special interests. Students are required to take the qualifying exam in the language of the survey sequence at the end of this year. This is also the year to pass the first modern language exam in French or German.

Students who complete their coursework and pass the French or German exam are awarded the A.M. in Classical Languages and Literatures.

The second year is similar, usually with a major focus on the second survey course and such courses as may allow students to explore new areas; in the spring, students are required to pass the second language qualifying examination. In the third year, students are expected to finish any remaining coursework and requirements; by the beginning of the fourth year they should have passed two two-hour oral comprehensive examinations in the history, literature, and culture pass two two-hour oral comprehensive examinations in the history, literature, and culture of Greco-Roman antiquity. Students should also, n the course of their fourth year, expect to develop a topic for the dissertation, which is written in the fifth and sixth years. The dissertation committee must be chaired by a member of Classics Department faculty and the majority of its members should come from this department.

#### Ph.D. Program in the Ancient Mediterranean World

The Program in the Ancient Mediterranean World (formerly the Committee on the Ancient Mediterranean World) was founded in 1975 with the intention of bringing together faculty whose fields of study, ranging from the ancient Near East and the ancient Greek world to late antiquity, adjoin and overlap chronologically and geographically. While these fields require mastery of relevant languages, the Program in the Ancient Mediterranean World is focused less on texts than on contexts; it offers students an opportunity to use philological skills in historical and cultural explorations. Most students in this program are in the areas of ancient history, history of ancient religions, Greek and Near Eastern studies, or late antiquity.

Although not primarily a language program, students in the Program in the Ancient Mediterranean World are required to take competency examinations in two ancient languages and should therefore have a strong background in at least one. All graduate students are expected to demonstrate proficiency in reading French and German, one language for the A.M. degree and the second for the Ph.D.; entering students should have begun this preparation if they are not already competent.

The Ph.D. Program in the Ancient Mediterranean World is designed for six years, the first two being devoted to a full load of nine courses, the third and fourth to completing course work and examinations, and the final two to the dissertation. In the first year of the Ancient Mediterranean World program, students regularly take the two-quarter research seminar and a range of courses, at least two of which must be distributed across two of the following disciplinary fields: literature; philosophy/ religion; art/archaeology; and social sciences (e.g. anthropology, sociology, political science). This is also the year to pass the first modern language exam in French or German. Students who complete their coursework and pass the French or German exam are awarded the A.M. in the Ancient Mediterranean World. In the second year, students are required to take a further nine courses, at least two of which must be

distributed across a different pair of the disciplinary fields specified above and to pass the first ancient language qualifying examination. Before the end of the third year, students are required to pass written and oral examinations in one major and two minor historical fields and, before the end of the fourth year, the second ancient language qualifying examination. Students should also, in the course of their fourth year, expect to develop a topic for the dissertation, and to begin which is written in the fifth and sixth years.

#### Ph.D. Program in Ancient Greek and Roman Philosophy

The study of ancient Greek and Roman philosophy is inherently interdisciplinary. Scholars must be able to situate philosophical texts in their broader cultural context. They must also be alive to the way a given text engages with and contributes to its philosophical tradition. Finally, they must be able to communicate effectively with scholars trained in either Classics or Philosophy. Thus, a student who plans to specialize in ancient philosophy ought to receive an interdisciplinary training. The Program in Ancient Greek and Roman Philosophy allows students to enroll either in the PhD program in Classics or in the PhD program in Philosophy but with the requirement that they will take certain courses in the department in which they are not enrolled. The program is a joint program in the sense that the faculty of both departments are committed to training students in the other department and in the sense that the students will develop a working relationship with each other, both through participation in seminars and in the Ancient Greek and Roman Philosophy workshop.

The Ph.D. Program in Ancient Greek and Roman Philosophy is designed to be completed in six years, the first two being devoted to a full load of nine courses, the third and fourth to completing course work and examinations, and the final two to the dissertation. In the first year, students regularly take one of the survey courses, a prose composition course, two quarters of seminar work, at least one of which must be in ancient philosophy, one course in the Philosophy department that deals with a topic other than Greek or Roman Philosophy, and one course in the minor language. Students are required to take the qualifying exam in the language of the survey sequence at the end of this year and also the first modern language exam in French or German. Students who complete their coursework and pass the French or German exam are awarded the A.M. in Classical Languages and Literatures. The second year is similar; in the spring, students are required to pass the second language qualifying examination. In the third year, students are required to take two additional graduate courses on a philosophical topic and the special field exam, which is a written examination on a Greek or Latin philosophical text (complete or an excerpt) of the candidate's own choosing. In the fourth year and fifth year students should expect to develop a topic for the dissertation, and to begin writing the dissertation. The dissertation should be completed in the sixth year.

# The Joint Ph.D. Program in Social Thought and Classics

The Joint Ph.D. Program in Social Thought and Classics is intended for students whose study of a particular issue or text from the ancient Greek and Roman world requires a broadly interdisciplinary approach alongside a professional mastery of philological skills. Those interested in pursuing this joint degree program must first be admitted in EITHER the Committee on Social Thought OR the Department of Classics and must complete at minimum the two quarter literature survey (Greek or Latin) offered by the Department of Classics, with an average grade of B or higher. Application shall then be made to the second department and, provided that the standards of admission to that department are met, students will be admitted to joint degree status. Their original department, however, will remain their sole department for purposes of registration and financial aid (including dissertation fellowships).

Students admitted to the joint degree program must satisfy both all the normal requirements for the A.M. and Ph.D. in Classical Languages and Literatures and all the normal requirements for the A.M. and Ph.D. in Social Thought. However, the Social Thought language requirement of a high level pass in a foreign language exam will be automatically met by the requirements of the Classics program. Students with joint degree status will be required to offer at least a majority of nonclassical texts on the Social Thought Fundamentals Examination. The dissertation proposal will have to be approved by both departments and the dissertation committee will normally include three faculty, at least one of whom will come from each department.

#### APPLICATION

The application process for admission and financial aid for all graduate programs in the Division of the Humanities is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online at: http://humanities.uchicago.edu/prospective/admissions.html.

Questions about admissions and aid should be directed to humanitiesadmissions@uchicago.edu or (773) 702-1552.

#### **COURSES**

The courses listed below are offered regularly, normally on a three-year rotating basis. In addition, new courses are frequently introduced, especially seminars and classics courses, and these cannot be predicted very far in advance. In recent years, courses included seminars on Early Rome, Tragedy and the Tragic, A History of Rhetoric, Greek Tragedy in Africa, Juvenal, The Ancient Economy, Oral Poetries, The Poetry of Death, Security in Latin Literature, and Stoics and Epicureans.

**GREEK** 

Homer

Hesiod

Greek Hymns

Greek Lyric Poetry

Greek Elegy

Plato

Aeschylus

Aristophanes

Menander

Herodotus

Sophocles

**Euripides** 

Survey of Greek Literature I

Survey of Greek Literature II

Survey of Greek Literature III

Lyric and Epinician Poetry

Aristotle

Thucydides

Greek Prose Composition

Theocritus

Hellenistic Poetry

**Greek Linguistics** 

# Latin

Livy

Roman Elegy

Roman Novel

Vergil

Augustine

Lucretius

Roman Satire

Roman Oratory

Survey of Latin Literature I

Survey of Latin Literature II

Survey of Latin Literature III

Ovid

Sallust and Tacitus

Horace

Roman Comedy

Silver Latin Epic

Latin Prose Composition

Political Philosophy

Latin Paleography

Medieval Literature

Letters: Cicero and Sen

### CLASSICS - CLASSICS COURSES

# CLAS 31113. Literatures of the Christian East: Late Antiquity, Byzantium, and Medieval Russia. 100 Units.

After the fall of Rome in 476 CE, literatures of the Latin West and — predominantly Greek-speaking — Eastern provinces of the Roman empire followed two very different paths. Covering both religious and secular genres, we will survey some of the most interesting texts written in the Christian East in the period from 330 CE (foundation of Constantinople) to the late 17th century (Westernization of Russia). Our focus throughout will be on continuities within particular styles and types of discourse (court entertainment, rhetoric, historiography, hagiography) and their functions within East Christian cultures. Readings will include Digenes Akritas and Song of Igor's Campaign, as well as texts by Emperor Julian the Apostate, Gregory of Nazianzus, Emphraim the Syrian, Anna Comnena, Psellos, Ivan the Terrible, and Archbishop Avvakum. No prerequisites. All readings in English.

Instructor(s): Boris Maslov Terms Offered: Spring

Equivalent Course(s): CMLT 32302,CLCV 21113,SLAV 22302,SLAV 32302,CMLT 22302

### CLAS 31200. History and Theory of Drama I. 100 Units.

The course is a survey of major trends and theatrical accomplishments in drama from the ancient Greeks through the Renaissance: Aeschylus, Sophocles, Euripides, Aristophanes, classical Sanskrit theater, medieval religious drama, Japanese Noh drama, Kyd, Marlowe, Shakespeare, and Molière, along with some consideration of dramatic theory by Aristotle, Sir Philip Sidney, Corneille, and others. Students have the option of writing essays or putting on short scenes in cooperation with other members of the course. The goal of these scenes is not to develop acting skill but, rather, to discover what is at work in the scene and to write up that process in a somewhat informal report. End-of-week workshops, in which individual scenes are read aloud dramatically and discussed, are optional but highly recommended. (D, E)

Instructor(s): D. Bevington Terms Offered: Autumn

Prerequisite(s): Preference given to students with third- or fourth-year standing. Note(s): May be taken in sequence with ENGL 13900/31100 or individually. This course meets the general education requirement in the dramatic, musical, and visual arts

Equivalent Course(s): ENGL 13800,CLCV 21200,CMLT 20500,CMLT 30500,ENGL 31000,TAPS 28400

# CLAS 31313. Prosody and Poetic Form: An Introduction to Comparative Metrics. 100 Units.

This class offers (i) an overview of major European systems of versification, with particular attention to their historical development, and (ii) an introduction to the theory of meter. In addition to analyzing the formal properties of verse, we will inquire into their relevance for the articulation of poetic genres and, more broadly, the history of literary (and sub-literary) systems. There will be some emphasis on Graeco-Roman quantitative metrics, its afterlife, and the evolution of Germanic and Slavic syllabo-tonic verse. No prerequisites, but a working knowledge of one European language besides English is strongly recommended.

Instructor(s): Boris Maslov Terms Offered: Winter

Equivalent Course(s): CMLT 32303,CLCV 21313,SLAV 22303,SLAV 32303,CMLT 22303

### CLAS 33608. Aristophanes' Athens. 100 Units.

This course will focus on nine of Aristophanes' plays in translation (*Acharnians; Wasps; Clouds; Peace; Birds; Lysistrata; Thesmophoriazousai; Frogs;* and *Ploutos*) in order to determine the value Old Comedy possesses for reconstructing sociohistorical structures, norms, expectations, and concerns. Among the topics to be addressed are the performative, ritual, and political contexts of Attic comedy, the constituency of audiences, the relationship of comedy to satire, the use of dramatic stereotypes, freedom of speech, and the limits of dissent.

Instructor(s): J. Hall Terms Offered: Winter

Equivalent Course(s): CLCV 23608,ANCM 33900,HIST 30803,FNDL 23608,HIST 20803

### CLAS 34506. Alexander the Great, 100 Units.

The exploits of Alexander the Great have fascinated historians since the end of the third century B.C. This course will provide an introduction not only to the history of Alexander's reign, but also to the main historiographical traditions (both ancient and modern) that shape our view of his legacy. All sources will be read in translation.

Instructor(s): C. Hawkins

Equivalent Course(s): HIST 20802, CLCV 24506, HIST 30802

### CLAS 34812. The Historical Context of the Platonic Dialogue. 100 Units.

Plato's historical fictions, like most such work, use the past as a way of confronting with current issues. This course will place them in the context of the history of philosophy and the development of prose literature, at a time when colloquial prose was new and philosophy was a highly contested term, overlapping with religion. Final paper.

Instructor(s): J. Redfield Terms Offered: Winter 2013 Note(s): Open to undergrads with consent of instructor Equivalent Course(s): CLCV 24812,SCTH 31920

# CLAS 35513. Anagnorisis and the Cognitive Work of Theater. 100 Units.

In the *Poetics* Aristotle conceives anagnorisis or recognition as one of the three constitutive parts of the dramatic plot and defines it as the "a change from ignorance (agnoia) to knowledge (gnosis)." Implying the rediscovery of something previously known anagnorisis refers to the emplotment and staging of a certain kind of cognitive work characteristic of theater (as a locus of theoria or theory). For recognition is not only required of the *dramatis personae* on stage but also of the spectators who need to (re)-cognize a character whenever s/he enters. Just as the characters' anagnorisis isn't restricted to the filiation, i.e., identity, of other characters the audience's cognition concerns the understanding the plot as a whole. In short, by focusing on *anagnorisis* we can gain insight in the specific cognitive work of theater (and drama). Naturally we will begin in antiquity and examine the instantiation of recognition in Homer's Odyssey and several Greek tragedies as well as its first theorization in Aristotle's Poetics. Then we will jump to the modernes, specifically Enlightenment theater's obsession with anagnorisis and the cognitive work it performs, and investigate dramas by Diderot and Lessing. Kleist's dramatic deconstructions of German bourgeois and classical theater test the Enlightenment's claim to reason and reform of human cognition. Our last stop will be Brecht's theater of "Entfremdung" that makes the alienation at the heart of anagnorisis into the centerpiece of his aesthetic and political project. If we have time, we will also take a look at comical recognition as self-reflection of its tragic counterpart. Readings and discussions in English.

Instructor(s): C. Wild Terms Offered: Autumn

Equivalent Course(s): GRMN 26913,CLCV 25513,CMLT 26913,CMLT 36913,TAPS 28441,GRMN 36913

# CLAS 36713. Mythical History, Paradigmatic Figures: Caesar, Augustus, Charlemagne, Napoleon. 100 Units.

What is the process by which some historical figures take on mythical proportions? This course examines four case studies of conquerors who attained sovereign power in times of war (conquest, civil war, revolution), who had a foundational role in empire-building, and who consciously strove to link themselves to the divine and transcendent. Their immense but ambiguous legacies persist to this day. Although each is distinct as a historical individual, taken together they merge to form a paradigm of the exceptional leader of epic proportions. Each models himself on exemplary predecessors: each invokes and reinvents myths of origin and projects himself as a model for the future. Basic themes entail mythic history, empire, the exceptional figure, modernity's fascination with antiquity, and the paradox of the imitability of the inimitable.

Instructor(s): M. Lowrie, R. Morrissey Terms Offered: Spring

Prerequisite(s): Third- or fourth-year standing

Equivalent Course(s): CLCV 26713,FNDL 22912,FREN 26701,FREN 36701,BPRO 26700

# CLAS 37913. Institutions and Economic Growth in the Ancient World. 100 Units.

It is now firmly established that the ancient Greek and Roman world experienced a considerable economic growth. This course will focus on the role of 'corporate institutions' in the process. A special attention will be devoted to the management of the work force (slavery vs. free labor) and to business finance and organization. The course will be based on the analysis of a broad set of ancient literary sources, from Xenophon and Aristotle to the Roman agronomists and the Digest, and on inscriptions and papyri, all in translation.

Instructor(s): A. Bresson Terms Offered: Spring

Equivalent Course(s): CLCV 27913

# CLAS 38513. City and Kingdom in Asia Minor, Fourth-Second Century BCE. 100 Units.

The Greek city did not die at Chaeronea. In Asia Minor, the conquest of Alexander was followed by a considerable expansion of the number of cities. But these cities entertained a complex relationship with the kingdoms in which (most of the time) they were included. The course will analyze this relationship on the basis of literary and epigraphic texts (all in translation) and of coins and archaeological documents in general.

Instructor(s): A. Bresson Terms Offered: Winter

Equivalent Course(s): CLCV 28513

### CLAS 40609. Democratic Athens. 100 Units.

For course description contact Art History.

Equivalent Course(s): ARTH 40610, ANCM 40609

# CLAS 42813. Concepts, Metaphors, Genealogies: Historical Semantics and Literature. 100 Units.

In this seminar, we will approach conceptual history (a.k.a. Begriffsgeschichte) as a resource for philologically-informed study of cultural interaction, continuity, and change. We will begin by developing a theoretical background in historical semantics, conceptual history, Metaphorologie, and history of ideas (focusing on the work of Nietzsche, Spitzer, Koselleck, Blumenberg, and Hadot); the second part of the quarter will be dedicated to historical and theoretical problems in the study of concepts in literary texts and across cultures. Reading knowledge of two (or more) foreign languages is a strong desideratum. As a final project, seminar participants will be expected to choose a particular concept and trace its history and uses in literary texts, ideally in more than one language.

Instructor(s): Boris Maslov Terms Offered: Spring Equivalent Course(s): SLAV 42802, CMLT 42802

### CLAS 44512. Virgil, The Aeneid. 100 Units.

A close literary analysis of one of the most celebrated works of European literature. While the text, in its many dimensions, will offer more than adequate material for classroom analysis and discussion, attention will also be directed to the extraordinary reception of this epic, from Virgil's times to ours.

Instructor(s): G. Most Terms Offered: Winter 2013

Prerequisite(s): Latin helpful

Equivalent Course(s): ENGL 35902, CMLT 35902, SCTH 35902

### CLAS 45613. Hölderlin and the Greeks. 100 Units.

The German poet Friedrich Hölderlin submitted to the paradoxical double-bind of Johann Joachim Winckelmann's injunction that "the only way for us [Germans] to become great or—if this is possible—inimitable, is to imitate the ancients." As he wrote in his short essay "The standpoint from which we should consider antiquity," Hölderlin feared being crushed by the originary brilliance of his Greek models (as the Greeks themselves had been), and yet foresaw that modern European self-formation must endure the ordeal of its encounter with the Greek Other. The faculty of the imagination was instrumental to the mediated self-formation of this Bildung project, for imagination alone was capable of making Greece a living, vitalizing presence on the page. Our seminar will therefore trace the work of poetic imagination in Hölderlin's texts: the spatiality and mediality of the written and printed page, and their relation to the temporal rhythms of spoken discourse. All texts will be read in English translation, but a reading knowledge of German and/or Greek would be desirable.

Instructor(s): C. Wild Terms Offered: Spring Equivalent Course(s): CMLT 35614,GRMN 35614

### CLAS 45913. Seminar: Greek Medical Writings. 100 Units.

Ancient medicine is intimately linked with philosophical investigation. From the beginning, it fed philosophical theory as well as adapted it to its own use. It also offers a valuable insight into how ordinary humans lived their lives. Medical practice takes us into the homes of the Greeks and Romans, while shedding light on their fears and aspirations. The extant literature is voluminous. There is, first of all, the Hippocratic corpus, a diverse collection of medical writings that drew inspiration from the reputed founder of scientific medicine, Hippocrates. These writings offer a unique insight into the first stages of the creation of a science. Later, Galen established the foundation of Western medicine by his brilliant dissections. As it happens, he was extremely voluble; and he took care to have his spoken words passed on in writing. As a result, we learn much more than just medical theory: we know how physicians competed with one another, and how they related to their patients. In sum, this seminar will study a selection of medical writings, conjointly with some philosophical and literary writings, in an attempt to gauge the intellectual and social significance of ancient medicine. Some knowledge of Greek will be useful.

Instructor(s): E. Asmis Terms Offered: Winter

### CLASSICS - GREEK COURSES

# GREK 31100. Elegiac Poetry. 100 Units.

This course is a study of poems composed over several centuries in elegiac and iambic meters. Readings will include works by Archilochus, Callinus, Semonides, Hipponax, and Callimachus.

Instructor(s): M. Payne Terms Offered: Spring Prerequisite(s): GREK 20300 or equivalent

Equivalent Course(s): GREK 21100

# GREK 31200. Philosophy: Plato's Phaedrus. 100 Units.

The *Phaedrus* is one of the most fascinating and compelling of Plato's Dialogues. Beginning with a playful treatment of the theme of erotic passion, it continues with a consideration of the nature of inspiration, love, and knowledge. The centerpiece is one the the most famous of the Platonic myths, the moving description of the charioteer and its allegory of the vision, fall, and incarnation of the soul.

Instructor(s): D. Martinez Terms Offered: Autumn

Prerequisite(s): GREK 20300 or equivalent Equivalent Course(s): GREK 21200,BIBL 31200

### GREK 31300. Tragedy. 100 Units.

This course is an introduction to Aeschylean drama, seen through the special problems posed by one play, *Prometheus Bound*. Lectures and discussions are concerned with the play, the development and early form of Attic drama, and philosophical material. Modern Aeschylean scholars are also read and discussed.

Instructor(s): E. Asmis Terms Offered: Winter Prerequisite(s): GREK 20300 or equivalent

Equivalent Course(s): GREK 21300

# GREK 31700. Lyric and Epinician Poetry. 100 Units.

This course will examine the lyric and epinician genres of archaic and classical Greece, focusing on song performed both by choruses and by individuals, and on themes ranging from mortality to joy, morality to sex, and politics to drinking. The imagery and performance of these poems will be explored, as well as the mechanics of meter, structure, and dialect. Readings will include Alcman, Sappho, Anacreon, Alcaeus, Simonides, Bacchylides, Pindar, and Timotheus.

Terms Offered: Will be offered 2015-16 Prerequisite(s): GREK 20300 or equivalent

Equivalent Course(s): GREK 21700

# GREK 31800. Greek Epic. 100 Units.

This course is a reading of Book 3 of the *Argonautica* of Apollonius of Rhodes. We consider character, story world, and the presence of the poet as we endeavor to understand what has become of epic poetry in the hands of its Hellenistic inheritors.

Terms Offered: Will be offered 2015-16 Prerequisite(s): Two years or more of Greek.

Equivalent Course(s): GREK 21800

# GREK 31900. Greek Oratory. 100 Units.

"With Isocrates, Greek artistic prose reached its technical perfection," says L. R. Palmer in *The Greek Language*. Yet Isocrates has not found nearly so prominent a place in the university curriculum as have Demosthenes and Lysias. This course will attempt to give the great orator his due. We will start with his speech on Helen, comparing it with Gorgias' famous *Encomium*. We will also read the *ad Demonicum*, which became something of a handbook in later Hellenistic and Roman-period schools, and the *Panegyricus*. We will consider carefully Isocratean language and diction, and why it has merited such sustained praise among connoisseurs of Greek prose style, ancient and modern. We will also emphasize the centrality of Isocrates' contribution to Greek paideia.

Terms Offered: Will be offered 2015-16 Prerequisite(s): Two years or more of Greek.

Equivalent Course(s): GREK 21900

# GREK 32300. Greek Tragedy I: Euripides. 100 Units.

We will try to read all of Euripides' *Hippolytus* in Greek. Students will be expected to prepare translations for class as well as read secondary material in English. Discussions will focus on the representation of shame aidos and desire, transgression and punishment, and speech and silence in the play.

Terms Offered: Will be offered 2014-2015. Prerequisite(s): GREK 20600 or equivalent Equivalent Course(s): GREK 22300

# GREK 32400. Greek Comedy: Aristophanes. 100 Units.

We will read in Greek Aristophanes' *Lysistrata*, a play whose timeless popularity often overshadows the fact that it was produced during a particularly menacing period of Athens' history. Students will prepare translations for class on Mondays and Wednesdays while Fridays will be devoted to discussions, based on secondary readings, that will include staging issues, the function of political comedy, and the potential uses of Aristophanes' plays as historical evidence.

Terms Offered: Will be offered to 2014-15. Prerequisite(s): GREK 20600 or equivalent Equivalent Course(s): GREK 22400

### GREK 32500. Greek Historians: Herodotus. 100 Units.

Book I is read in Greek; the rest of the *Histories* are read in translation. With readings from secondary literature, historical and literary approaches to the *Histories* are discussed, and the status of the *Histories* as a historical and literary text.

Terms Offered: Will be offered 2014-2015. Prerequisite(s): GREK 20600 or equivalent Equivalent Course(s): GREK 22500

### GREK 32700. Survey of Greek Literature I. 100 Units.

Greek poetry, including drama, from Homer to Callimachus. Lectures and discussions will be concerned chiefly with genre, style, meter, and rhetorical structure. There will be some close study of passages chosen to exemplify problems of interpretation or to display the major themes in each poet's work.

Instructor(s): S. Nooter Terms Offered: Autumn

### GREK 32800. Survey of Greek Literature II. 100 Units.

A study of the creation of the canonical Greek prose style in the 5th and 4th centuries. Rapid reading and translation exercises.

Instructor(s): H. Dik Terms Offered: Winter

# GREK 34400. Greek Prose Composition. 100 Units.

This course focuses on intensive study of the structures of the Greek language and the usage of the canonical Greek prose, including compositional exercises.

Instructor(s): H. Dik Terms Offered: Spring

### GREK 35000. Mastering Greek. 100 Units.

Instructor(s): H. Dik Terms Offered: Autumn

# GREK 35513. The Rhetoric of Ancient Greek Inscriptions. 100 Units.

The course will analyze the main categories of ancient Greek inscriptions (both private and public) as rhetorical constructs in the framework of the Greek cities. It will cover texts from the Archaic period to the Later Roman Empire. Attending this course supposes mastering ancient Greek in order to be able to translate the original documents.

Instructor(s): A. Bresson Terms Offered: Autumn

Equivalent Course(s): GREK 25513

### GREK 40112. Sophocles, Oedipus at Colonus. 100 Units.

A close literary and philological analysis of one of the most extraordinary of all Greek tragedies. While this play, in its many dimensions, will offer more than adequate material for classroom analysis and discussion, some attention will also be directed to its reception.

Instructor(s): G. Most Terms Offered: Winter 2013 Prerequisite(s): Greek or consent of instructor Equivalent Course(s): CMLT 35903,SCTH 35901

### GREK 48313. Symbolic Language in Ancient Greek Poetry. 100 Units.

In this course, we will read Greek poetry of the archaic and classical periods with an eye toward the evolution of symbolism and symbolic language. We will start with readings from Homer, paying special attention to his use of simile and ekphrasis, while also examining the ways that the text frames prophetic symbols, messages, and dreams. Next, we will read from a variety of lyric poets who make pointed use of symbolic imagery, particularly Sappho, Anacreon, Simonides, and Timotheus. We will see how images and symbols work in poetry that is (often) explicitly non-narrative, and what role such instances play in the construction of these poetic worlds. We will end with Aeschylus' *Oresteia*, a work known for its use of richly over-determined symbols. We will discuss the ways that drama transmutes figurative symbols into visual presences, then back again. Along the way, we will read theory on the use of symbols and constructions of meaning in the practice of language, literature, and performance. Readings of poetry will be in Greek. Instructor(s): S. Nooter Terms Offered: Winter

### CLASSICS - LATIN COURSES

### LATN 31100. Roman Elegy. 100 Units.

This course examines the development of the Latin elegy from Catullus to Ovid. Our major themes are the use of motifs and topics and their relationship to the problem of poetic persona.

Instructor(s): D. Wray Terms Offered: Spring

Equivalent Course(s): LATN 21100, CMLT 21101, CMLT 31101

# LATN 31200. Roman Novel. 100 Units.

We shall read from various Latin texts that participate in the tradition of the Ancient novel.

Instructor(s): M. Allen Terms Offered: Winter

Equivalent Course(s): LATN 21200

# LATN 31300. Vergil. 100 Units.

Vergil, *Aeneid*. Since many students have greater familiarity with the first half of the *Aeneid*, we will focus on the second half. Books 8, 10, and 12 will be read in entirety in Latin, with substantial selections from books 7, 9, and 11; we will also read the whole poem in translation. Topics of interest include: foundation and refoundation, the epic genre, the relation of myth to history, contemporary politics, and the social function of literature.

Instructor(s): M. Lowrie

Equivalent Course(s): LATN 21300,FNDL 25201

### LATN 31700. Epic. 100 Units.

We will read two books of Ovid's *Metamorphoses* in Latin and the entire poem in translation. Discussion topics will include prosody, diction, narrative technique, epic tradition, and comparative mythology.

Terms Offered: Not offered 2013-14; will be offered 2015-16.

Prerequisite(s): LATN 203 or quivalent Equivalent Course(s): LATN 21700

### LATN 31800. Roman Historian. 100 Units.

Primary readings are drawn from books 1 and 2 of the *Histories*, in which Tacitus describes a series of coups and revolts that made 69 AD the "Year of the Four Emperors." Parallel accounts and secondary readings are used to help bring out the methods of selecting and ordering data and the stylistic effects that typify a Tacitean narrative.

Terms Offered: Not offered 2013-14; will be offered 2015-16.

Prerequisite(s): LATN 20300 or equivalent

Equivalent Course(s): LATN 21800

### LATN 31900. Roman Comedy. 100 Units.

This course is a reading of a comic play by Plautus or Terence with discussion of original performance context and issues of genre, Roman comedy's relation to Hellenistic New Comedy, and related questions.

Terms Offered: Not offered 2013-14; will be offered 2015-16.

Prerequisite(s): LATN 20300 or equivalent

Equivalent Course(s): LATN 21900

### LATN 32100. Lucretius. 100 Units.

We will read selections of Lucretius' magisterial account of a universe composed of atoms. The focus of our inquiry will be: how did Lucretius convert a seemingly dry philosophical doctrine about the physical composition of the universe into a gripping message of personal salvation? The selections will include Lucretius' vision of an infinite universe, of heaven, and of the hell that humans have created for themselves on earth.

Terms Offered: Not offered 2013-14; will be offered 2014-15

Equivalent Course(s): LATN 22100

### LATN 32200. Roman Satire. 100 Units.

The course will focus on Juvenal and also consider the commentary tradition.

Terms Offered: Not offered 2013-14; will be offered 2014-15

Equivalent Course(s): LATN 22200

### LATN 32300. Roman Oratory. 100 Units.

Two of Cicero's speeches for the defense in the criminal courts of Rome receive a close reading in Latin and in English. The speeches are in turn considered in relation to Cicero's rhetorical theory as set out in the *De Oratore* and in relation to the role of the criminal courts in Late Republican Rome.

Terms Offered: Not offered 2013-14; will be offered 2014-15

Equivalent Course(s): LATN 22300

# LATN 32400. Post-Vergilian Epic. 100 Units.

Lucan. The goal of this course is threefold: 1. To read through some 2,000 lines of the *Bellum Civile* in Latin; 2. To read all of the epic in English; 3. To explore the critical responses to this play in the 20th century.

Terms Offered: Not offered 2013-14; will be offered 2014-15

Prerequisite(s): LATN 20300 or equivalent

Equivalent Course(s): LATN 22400

### LATN 32700. Survey of Latin Literature I. 100 Units.

We shall read extended selections from prose writers of recognized importance to the Latin tradition. Our sampling of texts will emphasize writers of the Late Republic and Early Principate.

Terms Offered: Not offered 2013-14; will be offered 2014-15

# LATN 32800. Survey of Latin Literature II. 100 Units.

With emphasis on major trends in modern critical interpretations of the major figures.

Terms Offered: Not offered 2013-14; will be offered 2014-15

# LATN 35000. Augustine's Confessions. 100 Units.

Substantial selections from books 1 through 9 of the *Confessions* are read in Latin (and all thirteen books in English), with particular attention to Augustine's style and thought. Further readings in English provide background about the historical and religious situation of the late fourth century AD.

Instructor(s): P. White Terms Offered: Winter

Prerequisite(s): LATN 206 or equivalent

Equivalent Course(s): FNDL 24310,LATN 25000

# LATN 36513. Tacitus: History and Politics in Republican Monarchy. 100 Units.

We will read the Life of Agricola and selections from the historical works, engaging with the politics of virtue and historical memory and the changing dynamics of literary productions in the early Principate.

Instructor(s): C. Ando Terms Offered: Spring Equivalent Course(s): FNDL 26513,LATN 26513

### CLASSICS - MODERN GREEK COURSES

# MOGK 30100-30200. Accelerated Elementary Modern Greek I-II.

This course is designed to help students acquire communicative competence in Modern Greek and a basic understanding of its structures. Through a variety of exercises, students develop all skill sets.

MOGK 30100. Accelerated Elementary Modern Greek I. 100 Units.

Terms Offered: Autumn

Equivalent Course(s): MOGK 11100,LGLN 11100

MOGK 30200. Accelerated Elementary Modern Greek II. 100 Units.

Terms Offered: Not offered in 2012-13

Equivalent Course(s): MOGK 11200,LGLN 11200

MOGK 30200. Accelerated Elementary Modern Greek II. 100 Units.

Terms Offered: Not offered in 2012-13

Equivalent Course(s): MOGK 11200,LGLN 11200



# DEPARTMENT OF COMPARATIVE LITERATURE

### Chair

Françoise Meltzer, Comparative Literature

### Professors

- Arnold Davidson, Philosophy
- Frederick de Armas, Romance Languages & Literatures
- Loren A. Kruger, English Language & Literature
- Françoise Meltzer, Comparative Literature
- Thomas Pavel, Romance Languages & Literatures
- Haun Saussy, Comparative Literature
- Michael Sells, Divinity School
- Joshua Scodel, English Language & Literature
- David Wellbery, Germanic Studies

### **Associate Professors**

- Lawrence Rothfield, English Language & Literature
- David Wray, Classics

#### **Assistant Professors**

• Boris Maslov

### **Emeritus Faculty**

- David Bevington, English Language & Literature
- Walter R. Johnson, Classics
- Kenneth J. Northcott, Germanic Studies
- Frantisek Svejkovsky, Slavic Languages & Literatures
- Robert von Hallberg, English Language & Literature
- Edward Wasiolek, Slavic Languages & Literatures
- Anthony C. Yu, Divinity

The Department of Comparative Literature is organized to facilitate the study of literature unrestricted by national boundaries and the conventional demarcations of subject matter. The department makes every effort to arrange a course of studies fitted to the individual student's background and interest. Students may choose from courses offered by the department, as well as those offered by relevant departments in the Division of the Humanities and in some cases those offered by other divisions. Students are expected to read relevant texts in the original languages. The master's program may be used to explore areas of interest by the student, as well as to strengthen areas of established interest and competence. Students who proceed to the Ph.D. program will choose one of two tracks in their learning and training:

- 1. National literatures
- 2. Literature and other disciplines

Track 1 is a program of studies of one national literature (the major) in its historical entirety and of a second national literature (the minor) in a specified area. Track 2 will consist of the study of a literature or some part of that literature and its relationship to another discipline such as sociology, psychoanalysis, philosophy, or religion. It is assumed that whichever option the student chooses, an international perspective on the relevant problem will be sought and maintained. Students will be provided with individual counseling to help them formulate programs of study that will answer to their needs and interests. There are no formal boundaries to the extent and nature of these interests, although the department will require that programs be coherently conceived and responsibly carried out.

# THE DEGREE OF MASTER OF ARTS

The objective of the program is the Ph.D. degree. Doctoral students in the program are eligible for the M.A. degree after completing the following requirements: For students entering the program in the fall 2003 and after, a program of eight graduate level courses (one full academic year), all of which must be taken for a letter grade; the required two quarter sequence CMLT 50103 and CMLT 50202; and demonstrated competence (high proficiency in a graduate literature course or high pass in a University examination) in two foreign languages, one of which must be either French or German. The remaining six quarter courses are normally divided among two literatures, although a student may, with department permission, place greater emphasis on one literature or on some special interest. Admission to the Ph.D. program will be based on a student's grade record and performance in the required two quarter sequence.

# THE DEGREE OF DOCTOR OF PHILOSOPHY

Programs leading to the doctor's degree in the department will be organized for students possessing the M.A. who have shown unusual competence and who wish to prepare themselves for teaching and scholarly investigation in comparative literature. Students are required to take six graduate level courses in their second year of Ph.D. study and two in their third year. Students are also required to write a minimum of two substantial papers the second year, and one the third year. Copies of these papers must be submitted to the graduate chair.

In the two years of post-M.A. courses, students may take no more than one of the required courses per year for a Pass/Fail grade (i.e., one of the six required graduate level courses for the first year of post-M.A. doctoral level study, and one of the two required graduate level courses in the second year of doctoral level study).

Before the student is recommended for admission to candidacy for the doctor's degree he or she must pass satisfactorily an oral examination after completion of eight Ph.D. level courses. This examination will be based on one of the following two options.

Track I requires The National Literature Oral. This is an examination based on no fewer than 60 titles in the major literature and no fewer than 30 titles in the minor

literature. The list for the major literature will cover all periods and genres. The list for minor literature will cover the major texts of the approved period or genre.

Track II requires The Field Oral. This is an oral examination on a representative list of approximately 70-90 titles in a given comparative field, such as literature and anthropology, literature and art, literature and film, literature and history, literature and linguistics, literature and music, literature and psychology, literature and sociology, literature and religion, literature and science. Texts chosen for this exam are to be distributed evenly between the two disciplines.

For admission to candidacy the same language requirements hold for BOTH tracks. These are as follows: either high proficiency in one language (=normally one graduate literature course) + two University reading exams in two additional languages (with a high pass on both) OR two high proficiency (graduate literature courses) in two languages. In both tracks one of those languages must be either French or German. All graduate students who wish to fulfill the language requirement through graduate course work must pick up a form in the departmental office to be filled out by the instructor after the course work has been completed. No student will get credit for the language requirement by course work without the instructor's completion of such a form. The form will rate the student's general knowledge of the language with almost exclusive emphasis on reading.

Before entering candidacy students will be asked to present and discuss their dissertation proposals at a proposal hearing attended by their dissertation committee and other interested faculty. After entering candidacy students will participate in a colloquium, normally in the fifth quarter after their admission to candidacy, in which they will discuss with their dissertation committee the current state of the dissertation and outline their plans and schedule for further progress. Students are strongly urged to join appropriate workshops and present dissertation chapters on a regular basis to such workshops. After satisfying the above requirements, the candidate is expected to pursue independent research under the direction of a member of the faculty culminating in the writing of a doctoral dissertation. The candidate must conclude his or her studies by defending successfully this dissertation in an oral final examination.

For additional information about the Comparative Literature program, please see http://complit.uchicago.edu/ or call (773) 702-8486.

### APPLICATION

The department requires a writing sample of no more than 25 pages, usually a critical essay written during the student's college years.

The application process for admission and financial aid for all graduate programs in Humanities is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online at: http://humanities.uchicago.edu/prospective/admissions.html.

Questions pertaining to admissions and aid should be directed to humanitiesadmissions@uchicago.edu or (773) 702-1552. Our application process is now entirely online. Please do not send any materials in hard copy. All

materials should be submitted through the online application (https://apply-humanities.uchicago.edu/apply/).

### COMPARATIVE LITERATURE COURSES

# CMLT 30500. History and Theory of Drama I. 100 Units.

The course is a survey of major trends and theatrical accomplishments in drama from the ancient Greeks through the Renaissance: Aeschylus, Sophocles, Euripides, Aristophanes, classical Sanskrit theater, medieval religious drama, Japanese Noh drama, Kyd, Marlowe, Shakespeare, and Molière, along with some consideration of dramatic theory by Aristotle, Sir Philip Sidney, Corneille, and others. Students have the option of writing essays or putting on short scenes in cooperation with other members of the course. The goal of these scenes is not to develop acting skill but, rather, to discover what is at work in the scene and to write up that process in a somewhat informal report. End-of-week workshops, in which individual scenes are read aloud dramatically and discussed, are optional but highly recommended. (D, E)

Instructor(s): D. Bevington Terms Offered: Autumn

Prerequisite(s): Preference given to students with third- or fourth-year standing. Note(s): May be taken in sequence with ENGL 13900/31100 or individually. This course meets the general education requirement in the dramatic, musical, and visual arts

Equivalent Course(s): ENGL 13800, CLAS 31200, CLCV 21200, CMLT 20500, ENGL 31000, TAPS 28400

### CMLT 30600. History and Theory of Drama II. 100 Units.

This course is a survey of major trends and theatrical accomplishments in Western drama from the eighteenth century into the twentieth (i.e., Sheridan, Ibsen, Chekhov, Strindberg, Wilde, Shaw, Brecht, Beckett, Pinter, Stoppard, Churchill, Kushner). Attention is also paid to theorists of the drama (e.g., Stanislavsky, Artaud, Grotowski). Students have the option of writing essays or putting on short scenes in cooperation with other members of the course. The goal of these scenes is not to develop acting skill but, rather, to discover what is at work in the scene and to write up that process in a somewhat informal report. End-of-week workshops, in which individual scenes are read aloud dramatically and discussed, are optional but highly recommended. (D, G)

Instructor(s): D. Bevington, H. Coleman Terms Offered: Winter

Prerequisite(s): Third- or fourth-year standing

Note(s): May be taken in sequence with ENGL 13800/31000 or individually. This course meets the general education requirement in the dramatic, musical, and visual arts.

Equivalent Course(s): ENGL 13900, CMLT 20600, ENGL 31100, TAPS 28401

# CMLT 31101. Roman Elegy. 100 Units.

This course examines the development of the Latin elegy from Catullus to Ovid. Our major themes are the use of motifs and topics and their relationship to the problem of poetic persona.

Instructor(s): D. Wray Terms Offered: Spring

Equivalent Course(s): LATN 21100, CMLT 21101, LATN 31100

### CMLT 31801. Caribbean Fiction: Self-Understanding and Exoticism. 100 Units.

The Caribbean is often described as enigmatic, uncommon, and supernatural. While foreigners assume that the Caribbean is exotic, this course will explore this assumption from a Caribbean perspective. We will examine the links between Caribbean and Old World imagination, the relationship between exoticism and Caribbean notions of superstition, and the way in which the Caribbean fictional universe derives from a variety of cultural myths.

Instructor(s): D. Desormeaux Terms Offered: Winter

Note(s): The course will be taught in English and all required texts are in English and English translations from French. A weekly session in French will be held for majors and graduate students in French and Comparative Literature.

Equivalent Course(s): FREN 33500, CMLT 21801, FREN 23500

# CMLT 31851. Zhuangzi: Lit, Phil, or Something Else. 100 Units.

The early Chinese book attributed to Master Zhuang seems to be a patchwork of fables, polemical discussions, arguments, examples, riddles, and lyrical utterances. Although it has been central to the development of both religious Daoism and Buddhism, the book is alien to both traditions. This course offers a careful reading of the work with some of its early commentaries. Requirement: classical Chinese.

Instructor(s): H. Saussy Terms Offered: Winter

Prerequisite(s): Requirement: classical Chinese

Equivalent Course(s): CMLT 21851, EALC 31851, FNDL 22306

# CMLT 32302. Literatures of the Christian East: Late Antiquity, Byzantium, and Medieval Russia. 100 Units.

After the fall of Rome in 476 CE, literatures of the Latin West and — predominantly Greek-speaking — Eastern provinces of the Roman empire followed two very different paths. Covering both religious and secular genres, we will survey some of the most interesting texts written in the Christian East in the period from 330 CE (foundation of Constantinople) to the late 17th century (Westernization of Russia). Our focus throughout will be on continuities within particular styles and types of discourse (court entertainment, rhetoric, historiography, hagiography) and their functions within East Christian cultures. Readings will include Digenes Akritas and Song of Igor's Campaign, as well as texts by Emperor Julian the Apostate, Gregory of Nazianzus, Emphraim the Syrian, Anna Comnena, Psellos, Ivan the Terrible, and Archbishop Avvakum. No prerequisites. All readings in English.

Instructor(s): Boris Maslov Terms Offered: Spring

Equivalent Course(s): CLAS 31113,CLCV 21113,SLAV 22302,SLAV 32302,CMLT 22302

# CMLT 32303. Prosody and Poetic Form: An Introduction to Comparative Metrics. 100 Units.

This class offers (i) an overview of major European systems of versification, with particular attention to their historical development, and (ii) an introduction to the theory of meter. In addition to analyzing the formal properties of verse, we will inquire into their relevance for the articulation of poetic genres and, more broadly, the history of literary (and sub-literary) systems. There will be some emphasis on Graeco-Roman quantitative metrics, its afterlife, and the evolution of Germanic and Slavic syllabo-tonic verse. No prerequisites, but a working knowledge of one European language besides English is strongly recommended.

Instructor(s): Boris Maslov Terms Offered: Winter

Equivalent Course(s): CLCV 21313, CLAS 31313, SLAV 22303, SLAV 32303, CMLT 22303

### CMLT 32400-32500. History of International Cinema I-II.

This sequence is required of students majoring in Cinema and Media Studies. Taking these courses in sequence is strongly recommended but not required.

# CMLT 32400. History of International Cinema I: Silent Era. 100 Units.

This course introduces what was singular about the art and craft of silent film. Its general outline is chronological. We also discuss main national schools and international trends of filmmaking.

Instructor(s): J. Lastra Terms Offered: Autumn

Prerequisite(s): Prior or concurrent registration in CMST 10100 required.

Required of students majoring in Cinema and Media Studies.

Note(s): This is the first part of a two-quarter course.

Equivalent Course(s): CMST 28500,ARTH 28500,ARTH 38500,ARTV 26500,ARTV 36500,CMLT 22400,CMST 48500,ENGL 29300,ENGL 48700,MAPH 36000

# CMLT 32500. History of International Cinema II: Sound Era to 1960. 100 Units.

The center of this course is film style, from the classical scene breakdown to the introduction of deep focus, stylistic experimentation, and technical innovation (sound, wide screen, location shooting). The development of a film culture is also discussed. Texts include Thompson and Bordwell's *Film History: An Introduction*; and works by Bazin, Belton, Sitney, and Godard. Screenings include films by Hitchcock, Welles, Rossellini, Bresson, Ozu, Antonioni, and Renoir.

Instructor(s): T. Gunning Terms Offered: Winter

Prerequisite(s): Prior or concurrent registration in CMST 10100 required.

Required of students majoring in Cinema and Media Studies.

Note(s): CMST 28500/48500 strongly recommended

Equivalent Course(s): CMST 28600,ARTH 28600,ARTH 38600,ARTV 26600,CMLT 22500,CMST 48600,ENGL 29600,ENGL 48900,MAPH 33700

# CMLT 32500. History of International Cinema II: Sound Era to 1960. 100 Units.

The center of this course is film style, from the classical scene breakdown to the introduction of deep focus, stylistic experimentation, and technical innovation (sound, wide screen, location shooting). The development of a film culture is also discussed. Texts include Thompson and Bordwell's *Film History: An Introduction*; and works by Bazin, Belton, Sitney, and Godard. Screenings include films by Hitchcock, Welles, Rossellini, Bresson, Ozu, Antonioni, and Renoir.

Instructor(s): T. Gunning Terms Offered: Winter

Prerequisite(s): Prior or concurrent registration in CMST 10100 required. Required of students majoring in Cinema and Media Studies.

Note(s): CMST 28500/48500 strongly recommended

Equivalent Course(s): CMST 28600,ARTH 28600,ARTH 38600,ARTV 26600,CMLT 22500,CMST 48600,ENGL 29600,ENGL 48900,MAPH 33700

# CMLT 33201. Returning the Gaze: The Balkans and Western Europe. 100 Units.

This course investigates the complex relationship between South East European self-representations and the imagined Western "gaze" for whose benefit the nations stage their quest for identity and their aspirations for recognition. We also think about differing models of masculinity, the figure of the gypsy as a metaphor for the national self in relation to the West, and the myths Balkans tell about themselves. We conclude by considering the role that the imperative to belong to Western Europe played in the Yugoslav wars of succession. Some possible texts/films are Ivo Andric, *Bosnian Chronicle*; Aleko Konstantinov, *Baj Ganyo*; Emir Kusturica, *Underground*; and Milcho Manchevski, *Before the Rain*.

Instructor(s): A. Ilieva Terms Offered: Autumn

Equivalent Course(s): SOSL 27200,CMLT 23201,NEHC 20885,NEHC 30885,SOSL 37200

### CMLT 33301. Balkan Folklore. 100 Units.

This course is an overview of Balkan folklore from ethnographic, anthropological, historical/political, and performative perspectives. We become acquainted with folk tales, lyric and epic songs, music, and dance. The work of Milman Parry and Albert Lord, who developed their theory of oral composition through work among epic singers in the Balkans, helps us understand folk tradition as a dynamic process. We also consider the function of different folklore genres in the imagining and maintenance of community and the socialization of the individual. We also experience this living tradition first hand through our visit to the classes and rehearsals of the Chicago-based ensemble "Balkanske igre."

Instructor(s): A. Ilieva Terms Offered: Winter

Equivalent Course(s): SOSL 26800,CMLT 23301,NEHC 20568,NEHC 30568,SOSL 36800

# CMLT 33401. The Burden of History: A Nation and Its Lost Paradise. 100 Units.

This course begins by defining the nation both historically and conceptually, with attention to Romantic nationalism and its flourishing in Southeastern Europe. We then look at the narrative of original wholeness, loss, and redemption through which Balkan countries retell their Ottoman past. With the help of Freud's analysis of masochistic desire and Žižek's theory of the subject as constituted by trauma, we contemplate the national fixation on the trauma of loss and the dynamic between victimhood and sublimity. The figure of the Janissary highlights the significance of the other in the definition of the self. Some possible texts are Petar Njegoš's Mountain Wreath; Ismail Kadare's The Castle; and Anton Donchev's Time of Parting.

Instructor(s): A. Ilieva Terms Offered: Winter

Equivalent Course(s): SOSL 27300, CMLT 23401, NEHC 20573, NEHC 30573, SOSL 37300

# CMLT 33901. Gender in the Balkans through Literature and Film. 100 Units.

This introductory course examines the poetics of femininity and masculinity in some of the best works of the Balkan region. We contemplate how the experiences of masculinity and femininity are constituted and the issues of socialization related to these modes of being. Topics include the traditional family model, the challenges of modernization and urbanization, the socialist paradigm, and the post-socialist changes. Finally, we consider the relation between gender and nation, especially in the context of the dissolution of Yugoslavia. All work in English. Instructor(s): A. Ilieva Terms Offered: Winter

CMLT 34402. Early Novels: The Ethiopian Story, Parzifal, Old Arcadia. 100 Units. The course will introduce the students to the oldest sub-genres of the novel, the

idealist story, the chivalric tale and the pastoral. It will emphasize the originality of these forms and discuss their interaction with the Spanish, French, and English novel.

Instructor(s): T. Pavel, G. Most Terms Offered: Winter

Equivalent Course(s): SCTH 35914,RLLT 24402,RLLT 34402,CMLT 24402

### CMLT 34410. Kurosawa and His Sources. 100 Units.

This interdisciplinary graduate course focuses on ten films of Akira Kurosawa which were based on literary sources, raging from Ryunosuke Akutagawa, Jules Dassin, Georges Simenon, and Shakespeare to Dostoevsky, Tolstoy, Gorky, and Arseniev. The course will not only introduce to some theoretical and intermedial problems of adaptation of literature to film but also address cultural and political implications of Kurosawa's adaptation of classic and foreign sources. We will study how Kurosawa's turn to literary adaptation provided a vehicle for circumventing social taboos of his time and offered a screen for addressing politically sensitive and sometimes censored topics of Japan's militarist past, war crimes, defeat in the Second World War, and ideological conflicts of reconstruction. The course will combine film analysis with close reading of relevant literary sources, contextualized by current work of political, economic, and cultural historians of postwar Japan. The course is meant to provide a hands-on training in the interdisciplinary methodology of Comparative Literature. Undergraduate students can be admitted only with the permission of the instructor. Prerequisites: Intro to Film or Close Analysis of Film class.

Instructor(s): Olga Solovieva Terms Offered: Winter

Note(s): Course limited to 10 participants.

Equivalent Course(s): EALC 34410

# CMLT 34504. Russian Poetry from Blok to Pasternak. 100 Units.

We will survey the selected poetry of major Russian modernists from 1900 to 1935, including lyrical and narrative genres. Poets covered include: Aleksandr Blok, Andrei Belyi, Viacheslav Ivanov, Nikolai Gumilev, Osip Mandel'shtam, Anna Akhmatova, Velimir Khlebnikov, Vladimir Mayakovsky, Marina Tsvetaeva, Boris Pasternak. In addition to tracing the development of poetic doctrines (from symbolism through acmeism and futurism), we will investigate the close correlations between formal innovation and the changing semantics of Russian poetry. Attention will also be paid to contemporary developments in Western European poetry. Knowledge of Russian required.

Instructor(s): R. Bird, B. Maslov Terms Offered: Winter

Prerequisite(s): Knowledge of Russian required.

Equivalent Course(s): RUSS 34504

### CMLT 35614. Hölderlin and the Greeks. 100 Units.

The German poet Friedrich Hölderlin submitted to the paradoxical double-bind of Johann Joachim Winckelmann's injunction that "the only way for us [Germans] to become great or—if this is possible—inimitable, is to imitate the ancients." As he wrote in his short essay "The standpoint from which we should consider antiquity," Hölderlin feared being crushed by the originary brilliance of his Greek models (as the Greeks themselves had been), and yet foresaw that modern European self-formation must endure the ordeal of its encounter with the Greek Other. The faculty of the imagination was instrumental to the mediated self-formation of this Bildung project, for imagination alone was capable of making Greece a living, vitalizing presence on the page. Our seminar will therefore trace the work of poetic imagination in Hölderlin's texts: the spatiality and mediality of the written and printed page, and their relation to the temporal rhythms of spoken discourse. All texts will be read in English translation, but a reading knowledge of German and/or Greek would be desirable.

Instructor(s): C. Wild Terms Offered: Spring Equivalent Course(s): CLAS 45613,GRMN 35614

### CMLT 35713. Toward a Critique of Avarice. 100 Units.

With the help of Freud, Marx, Lacan, Foucault, Agamben (among others) along with some highpoints of the European literary canon, we propose to develop a "critique of avarice," a project to be sharply distinguished from the moralistic indignation at greed. Our historical and theoretical reflections on avarice open out on to a number of domains and modes of inquiry: from literary criticism to psychoanalysis, from the study of political economy to theories of biopolitics, and finally to the "Jewish question" in relation to all of this. The core text and touchstone of the seminar will be Shakespeare's *The Merchant of Venice*, in which the tensions, ambiguities, disavowals, hatreds, projections, and repressions associated with the "avarice complex" are magisterially staged and played out. Attention will also be given to the subsequent history of the figure of Shylock as well as to the capacities for mercy and forgiveness that were posited as the ideal opposites of avarice and usury. One of the goals of the seminar is to interrogate this very opposition.

Instructor(s): E. Santner, M. Dolar Terms Offered: Autumn

Equivalent Course(s): CDIN 35713, GRMN 35713

# CMLT 35902. Virgil, The Aeneid. 100 Units.

A close literary analysis of one of the most celebrated works of European literature. While the text, in its many dimensions, will offer more than adequate material for classroom analysis and discussion, attention will also be directed to the extraordinary reception of this epic, from Virgil's times to ours.

Instructor(s): G. Most Terms Offered: Winter 2013

Prerequisite(s): Latin helpful

Equivalent Course(s): CLAS 44512, ENGL 35902, SCTH 35902

# CMLT 35903. Sophocles, Oedipus at Colonus. 100 Units.

A close literary and philological analysis of one of the most extraordinary of all Greek tragedies. While this play, in its many dimensions, will offer more than adequate material for classroom analysis and discussion, some attention will also be directed to its reception.

Instructor(s): G. Most Terms Offered: Winter 2013 Prerequisite(s): Greek or consent of instructor Equivalent Course(s): GREK 40112,SCTH 35901

### CMLT 36001. How to Think about Literature: the Main Notions. 100 Units.

In literary studies new trends and theories rarely supersede older ones. While in physics and biology Aristotle has long been obsolete, literary scholars still find his *Poetics* to be a source of important insights. And yet literary studies are not resistant to change. Over time, they have experienced a genuine historical growth in thinking. Perhaps one can best describe the discipline of literature as a stable field of recurring issues that generate innovative thinking. This course will introduce graduate students to the main notion of the field. Its aim is to identify an object of study that is integral, yet flexible enough to allow for comparisons between its manifestations in various national traditions.

Instructor(s): T. Pavel Terms Offered: Spring

Equivalent Course(s): RLLT 36000

# CMLT 36610. Kinds of Narratives: the Novella. 100 Units.

The course will discuss the place of the novella among nineteenth-century prose narratives. We will read works by Balzac, Gogol, Stifter, Mérimée, Melville, Fontane, Chekhov, and Henry James.

Instructor(s): T. Pavel Terms Offered: Autumn

Note(s): Taught in English. For French majors and graduates there will be a weekly one-hour meeting to study the original French texts.

# CMLT 36913. Anagnorisis and the Cognitive Work of Theater. 100 Units.

In the *Poetics* Aristotle conceives anagnorisis or recognition as one of the three constitutive parts of the dramatic plot and defines it as the "a change from ignorance (agnoia) to knowledge (gnosis)." Implying the rediscovery of something previously known anagnorisis refers to the emplotment and staging of a certain kind of cognitive work characteristic of theater (as a locus of theoria or theory). For recognition is not only required of the dramatis personae on stage but also of the spectators who need to (re)-cognize a character whenever s/he enters. Just as the characters' anagnorisis isn't restricted to the filiation, i.e., identity, of other characters the audience's cognition concerns the understanding the plot as a whole. In short, by focusing on anagnorisis we can gain insight in the specific cognitive work of theater (and drama). Naturally we will begin in antiquity and examine the instantiation of recognition in Homer's Odyssey and several Greek tragedies as well as its first theorization in Aristotle's Poetics. Then we will jump to the modernes, specifically Enlightenment theater's obsession with anagnorisis and the cognitive work it performs, and investigate dramas by Diderot and Lessing. Kleist's dramatic deconstructions of German bourgeois and classical theater test the Enlightenment's claim to reason and reform of human cognition. Our last stop will be Brecht's theater of "Entfremdung" that makes the alienation at the heart of anagnorisis into the centerpiece of his aesthetic and political project. If we have time, we will also take a look at comical recognition as self-reflection of its tragic counterpart. Readings and discussions in English.

Instructor(s): C. Wild Terms Offered: Autumn

Equivalent Course(s): GRMN 26913,CLCV 25513,CLAS 35513,CMLT 26913,TAPS 28441,GRMN 36913

# CMLT 37414. Interpolation: Towards a Poetics of Philology in Early-Modern Europe. 100 Units.

This course will examine the philological notion of interpolation—the insertion of new material into a text perceived to be faulty or lacking—not only as an operation of textual reparation or editorial alteration, but more importantly as constituting in and of itself a form of literary writing or authorship, whose poetics we will explore. What is, we will ask, the relation between literary scholarship and literary creation? We will concentrate primarily, but not exclusively, on early-modern writings, employing a comparative perspective which will allow the examination of other artistic practices beyond the literary, including music and sculpture. Among the authors to be considered will be Euripides, Pascal, Mme de Sévigné, Mme Dacier, Furetière, Milton, Swift and Baudelaire. In addition, theoretic readings will be discussed to examine problems such as the coherence and identity of literary texts, the role of the author, and the status of philology and literary criticism.

Instructor(s): S. Rabau Terms Offered: Winter

Note(s): Taught in English, but students registering under the French course number will read French texts in their original language and conduct all written work in French.

Equivalent Course(s): FREN 37414, REMS 37414, CMLT 27414, FREN 27414

### CMLT 39101. Pascal and Simone Weil. 100 Units.

Pascal in the seventeenth century and Simone Weil in the twentieth formulated a compelling vision of the human condition, torn between greatness and misery. They showed how human imperfection coexists with the noblest callings, how attention struggles with diversion and how individuals can be rescued from their usual reliance on public opinion and customary beliefs. Both thinkers point to the religious dimension of human experience and suggest unorthodox ways of approaching it.

Instructor(s): T. Pavel Terms Offered: Spring

Prerequisite(s): Third- or fourth-year standing.

Note(s): The course will be taught in English. For French undergraduates and graduates, we will hold a bi-weekly one-hour meeting to study the original French texts.

Equivalent Course(s): FREN 39100, CMLT 29101, FNDL 21806, FREN 29100

# CMLT 42802. Concepts, Metaphors, Genealogies: Historical Semantics and Literature. 100 Units.

In this seminar, we will approach conceptual history (a.k.a. Begriffsgeschichte) as a resource for philologically-informed study of cultural interaction, continuity, and change. We will begin by developing a theoretical background in historical semantics, conceptual history, Metaphorologie, and history of ideas (focusing on the work of Nietzsche, Spitzer, Koselleck, Blumenberg, and Hadot); the second part of the quarter will be dedicated to historical and theoretical problems in the study of concepts in literary texts and across cultures. Reading knowledge of two (or more) foreign languages is a strong desideratum. As a final project, seminar participants will be expected to choose a particular concept and trace its history and uses in literary texts, ideally in more than one language.

Instructor(s): Boris Maslov Terms Offered: Spring Equivalent Course(s): CLAS 42813, SLAV 42802

# CMLT 43002. The Face on Film. 100 Units.

The seminar will discuss on the workings of the face—as imprint of identity, as figure of subjectivity, as privileged object of representation, as mode and ethic of address—through film theory and practice. How has cinema responded to the mythic and iconic charge of the face, to the portrait's exploration of model and likeness, identity and identification, the revelatory and masking play of expression, the symbolic and social registers informing the human countenance. At this intersection of archaic desires and contemporary anxieties, the face will serve as our medium by which to reconsider, in the cinematic arena, some of the oldest questions on the image. Among the filmmakers and writers who will inform our discussion are Balázs, Epstein, Kuleshov, Dreyer, Pasolini, Hitchcock, Warhol, Bresson, Bazin, Barthes, Doane, Aumont, Nancy, Didi-Huberman, and others.

Instructor(s): Noa Steimatsky Terms Offered: Spring Equivalent Course(s): ARTH 43002,CMST 63002

### CMLT 43350. Lacan and Religion. 100 Units.

Whereas Freud believed with the Enlightenment that science would increasingly demonstrate religion to be an illusion, Lacan saw religion as that which would save us from the increasingly loud discourse of science. From Lacan's early (Freudian) notion of the Nom-du-Père, to his later conflation of Freud and Christ (as rescuing the father), and finally to his Barromean knots and the sinthome, Lacan considers religion a "garbage can, for it has not the slightest homogeneity." This course, then, will consider Lacan's concept of religion. We will begin with readings from Freud's texts on religion: "Obsessive Actions and Religious Practices," "The Future of an Illusion," "Totem and Taboo," "Civilization and its Discontents," "Moses and Monotheism." We will then read the texts on religion from Lacan, considering how his views change on the subject, and what the stakes are in his efforts to separate psychoanalysis from science and religion.

Instructor(s): Françoise Meltzer Terms Offered: Winter

Prerequisite(s): Reading knowledge of French, basic familiarity with Lacan.

Equivalent Course(s): DVPR 49904

### CMLT 46114. German Classical-Romantic Aesthetics I. 100 Units.

This seminar will treat crucial texts in the so-called "classical" tradition of aesthetic theory in Germany. Authors treated will be Winckelmann, Herder, Goethe, Schiller. The seminar will center on the close reading of works by these authors, including essays on Greek sculpture by Winckelmann, Herder's essay on sculpture, selections from Kant's Critique of the Power of Judgment, Goethe's essays on the Laocoon statue, his introduction to the Propyläen, Schiller's Letters on Aesthetic Education, as well as selected works of secondary literature. Central topics: a) the concept of form; b) aesthetic experience and freedom; c) natural and artistic beauty; d) the paradigmatic status of Greek art; e) the autonomy of art. Texts will be available in English and German. Discussion in English.

Instructor(s): D. Wellbery Terms Offered: Winter Equivalent Course(s): SCTH 44912,GRMN 46114

### CMLT 46214. German Classical-Romantic Aesthetics II. 100 Units.

This seminar will treat crucial texts in the "romantic" tradition of aesthetic theory in Germany. Authors treated will be Friedrich and August Wilhelm Schlegel, Novalis, Schelling, and Hegel. The centerpiece of the seminar will be the study of Schelling's Philosophy of Art. We will also examine portions of Hegel's Lectures on Aesthetics. Important contributions to the scholarship on romanticism (broadly conceived) will also be considered. Central topics will be: a) the historicity of art; b) the systematic unity of the arts; c) irony. Texts will be available in English and German. Discussion in English.

Instructor(s): D. Wellbery Terms Offered: Spring Equivalent Course(s): SCTH 44913,GRMN 46214

# CMLT 50008. Michel Foucault: Self, Government, and Regimes of Truth. 100 Units.

A close reading of Michel Foucault's 1979-80 course at the Collège de France, *Du gouvernement des vivants*. Foucault's most extensive course on early Christianity, these lectures examine the relations between the government of the self and regimes of truth through a detailed analysis of Christian penitential practices, with special attention to the practices of *exomologēsis* and *exagoreusis*. We will read this course both taking into account Foucault's sustained interest in ancient thought and with a focus on the more general historical and theoretical conclusions that can be drawn from his analyses. (I)

Instructor(s): A. Davidson Terms Offered: Autumn

Prerequisite(s): Limited enrollment; Students interested in taking for credit should attend first seminar before registering. Reading knowledge of French required. Consent Only.

Equivalent Course(s): DVPR 50008, PHIL 50008

# CMLT 50200. Seminar: Catharsis and Other Aesthetic Responses. 100 Units.

Consent of instructor. Fulfills the core course requirement for CompLit students. Students who wish to take this course but have already taken a Comparative Literature core course may take this course with permission of the instructor. For other humanities PhDs: ACTIVE working knowledge of at least one of the following: French, German, (classical) Greek or Spanish. This PhD seminar examines the ramifications of catharsis and other responses to texts and images, in other words it investigates the relationship between effect and affect. Beginning with Aristotle and present day responses to catharsis, we will investigate the kinds of aesthetic response invoked by tragic drama and theory (esp Hegel), realism (Lukacs, Bazin and Brecht), as well as theories of pleasure (Barthes, Derrida), judgment (Kant, Bourdieu) and boredom (Spacks). We will conclude with a test case, exploring the potential and limitations of catharsis as an appropriate response to the literary and cinematic representation of trauma in and after the Argentine 'dirty war.' An essential part of the discussion will be the problem of translating key terms, not only from one language to another but also from one theoretical discourse and/or medium to another.

Instructor(s): Loren Kruger Terms Offered: Winter

Note(s): Comp Lit Ph.D. core course

Equivalent Course(s): CMST 50200, ENGL 59304

### CMLT 50201. Seminar: Contemporary Critical Theory. 100 Units.

This course will examine some of the salient texts of postmodernism. Part of the question of the course will be the status and meaning of "post"-modern, post-structuralist. The course requires active and informed participation.

Instructor(s): Françoise Meltzer Terms Offered: Autumn

Note(s): Comp Lit core course. 2nd part of sequence.

Equivalent Course(s): DVPR 50201

# CMLT 51500. Race, Media and Visual Culture. 100 Units.

For course description contact CDIN Center for Disciplinary Innovation. Equivalent Course(s): CDIN 51300,ARTH 49309,ARTV 55500,CMST 51300,ENGL 51300



# Department of East Asian Languages and Civilizations

### Chair

- Michael K. Bourdaghs Professors
- Michael K. Bourdaghs
- Donald Harper
- James Ketelaar, History
- Haun Saussy, Comparative Literature
- Edward L. Shaughnessy
- Hung Wu, Art History
- Judith Zeitlin

**Associate Professors** 

- Guy S. Alitto, History
- Susan Burns, History
- Paul Copp
- · Kyeong Hee Choi
- Jacob Eyferth
   Assistant Professors
- Paola Iovene
- · Reginald Jackson
- Hoyt Long Senior Lecturers
- Fangpei Cai
- Hi Sun Kim
- · Hiroyoshi Noto
- Youqin Wang
- Jun Yang

Lecturers

- Yoko Katagiri
- Meng Li
- Yuxiang Liu
- Harumi Lory
- · Misa Miyachi
- Ji Eun Kim
- Laura Skosey
   Emeritus Faculty

- George Chih Chao Chao
- Norma Field
- Harry Harootunian, History
- Ping Ti Ho, History
- Tetsuo Najita, History
- David T. Roy
- Tsuen Hsuin Tsien
- Anthony C. Yu, Divinity

# **Program Description**

The Department of East Asian Languages and Civilizations is a multidisciplinary department, with faculty specialists in history, art, philosophy, languages, linguistics, literature, and religions, that offers a program of advanced study of the traditional and modern cultures of China, Japan, and Korea. At the same time, students are encouraged to pursue their interests across traditional disciplinary lines by taking courses in other departments in the Divisions of the Social Sciences and the Humanities.

The Department offers both MA and PhD degrees, though the MA degree is usually viewed as preparatory to doctoral studies. In other words, graduate education is primarily geared toward the PhD degree, and the Department does not have an independent Masters Degree program. Students who arrive with a master's degree will be expected to fulfill the requirement outlined for Scholastic Residence. Students interested in a terminal MA degree should contact the University of Chicago Master of Arts Program in the Humanities or the Master of Arts Program in Social Sciences.

During the first two years, students take nine courses each year. Depending on students' interests and preparation, some of the coursework may take place outside the Department. It may also include work in language, either the primary language of study or a secondary one, whether East Asian or not, as well as in a second East Asian civilization. Many students may also wish to spend one or more years in Japan, China, Taiwan, or Korea to achieve language mastery or do research for their dissertation. Teaching opportunities for students are also available.

After the PhD qualifying exam, which consists of both an oral and written component, acceptance of a dissertation proposal admits a student to candidacy. Students are expected to write and defend dissertations that make original contributions to knowledge. The degree is conferred upon the successful defense of the completed dissertation.

#### Contact

Dawn Brennan, Department Coordinator Wieboldt Hall, Room 301 1050 East 58th Street Chicago, IL 60637

Phone: 773.702.1255

# ealc@uchicago.edu

Website: ealc.uchicago.edu

# INFORMATION ON HOW TO APPLY

The application process for admission and financial aid for all graduate programs in Humanities is administered through the divisional Office of the Dean of Students. The application for Admission and Financial Aid, with instructions, deadlines, and department specific information is available online at: http://humanities.uchicago.edu/prospective/admissions.html.

Questions pertaining to admissions and aid should be directed to humanitiesadmissions@uchicago.edu or (773) 702-1552.

Foreign students must provide evidence of English proficiency by submitting scores from either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS).

For additional information about the East Asian Languages and Civilizations program, please see http://ealc.uchicago.edu or call (773) 702-1255.

# **Program Requirements**

The requirements are filled in three stages: Masters Degree Requirements (for students entering with or without an MA in East Asian Studies), PhD Candidacy Requirements, and PhD Degree Requirements.

# Master's Degree Requirements

- 1. Complete 18 courses
  - 1. 1 course must be Directed Translation
  - 2. No more than 3 courses taken for an "R" or "P" grade
  - 3. 2 non-specialization East Asian Civilization courses
- 2. No outstanding incompletes
- 3. Courses or Placement at the 3rd year level of one East Asian Language.
- 4. 1 M.A. thesis or 2 M.A. papers

# PhD Candidacy Requirements

- 1. 2nd East Asian Language
- 2. Mastery of Languages required for primary research
- 3. Proficiency in any additional languages required for research
- 4. Pass PhD Qualifying Exams
- 5. Defense and approval of Dissertation Proposal

### Admission to Candidacy

Once the student has passed the dissertation proposal defense, the Department will certify that the student has met all the requirements for Admission to Candidacy (all requirements for degree with the exception of the dissertation). The Department will submit paperwork to the Office of the Dean of Student that recommends that the student be admitted to candidacy for the PhD degree. This status is sometimes known at All But Dissertation (ABD).

- 1. Admission to Candidacy
- 2. Defense of the Dissertation

# Joint Ph.D. Program in East Asian Cinema

The Program in Cinema and Media Studies and the Department of East Asian Languages and Civilizations have formed a joint PhD program in East Asian cinema at the University of Chicago. The University has long-standing engagement with both Film and East Asian studies and has already graduated a number of scholars who are changing the field of East Asian cinema around the world. The purpose of this degree program is to provide the best possible training in the methods, languages, and cultural contexts needed to undertake original research on specific topics in East Asian cinema and media studies.

### East Asian Languages & Civilizations Courses

EALC 30101	Skills and Methods in Chinese Painting History	100
EALC 31851	Zhuangzi: Lit, Phil, or Something Else	100
EALC 34500	Reading Qing Documents	100
EALC 34607	Chinese Independent Documentary Film	100
EALC 34710	Japan and the World in 19th Century Art	100
EALC 34807	History of Japanese Philosophy	100
EALC 34900	The Art of Ancestral Worship	100
EALC 36001	Anyang: History of Research of the Last Shang Dynasty Capital	100
EALC 36201	Medicine and Culture in Modern East Asia	100
EALC 36500	The Shi Jing: Classic of Poetry	100
EALC 36601	East Asian Languages, Acquisition and Pedagogy	100
EALC 37708	Feminine Space in Chinese Art	100
EALC 38400	Communities, Media and Selves in Modern Chinese Literature	100
EALC 38411	Thought Reform and Social Control in the PRC	100
EALC 38600	Contemporary Chinese Literature	100
EALC 39401	The Ghost Tradition in Chinese Literature, Opera, and Film	100
EALC 40456	Media, History, East Asia	100
EALC 40500	Sem: Mod Chinese Hist 1	
EALC 40501	Sem: Mod Chinese Hist 2	
EALC 40508	Readings in Literary Chinese I	100
EALC 40509	Readings in Literary Chinese II	100
EALC 40510	Readings in Literary Chinese III	
EALC 41455	Peach Blossom Fan	100
EALC 42400	Sem: Mod Korean Hist 1	
EALC 42101	Sem: Mod Korean Hist 2	
EALC 42512	The Painter's Project in Japan, 1750-1930	100

EALC 42609	Seminar: Japanese Handscroll Paintings	100
EALC 42610	Imperial Collections of Chinese Painting & Calligraphy	100
EALC 44420	Facism and Japanese Culture	100
EALC 45530	Manuscript Culture in Ancient and Medieval China	100
EALC 45800	Readings in Chinese Buddhist Texts	100
EALC 46030	Craft Production in Early China	100
EALC 48220	Gender in Late Imperial and Republican China	100
EALC 59700	Thesis Research	100
EALC 60000	Reading Course: Special Topic Chinese, Reading Course	100
EALC 65000	Directed Translation	100
EALC 70000	Advanced Study: East Asian	
Chinese Courses		
CHIN 10100	Elementary Modern Chinese I	100
CHIN 10200	Elementary Modern Chinese II	100
CHIN 10300	Elementary Modern Chinese III	100
CHIN 11100	First-Year Chinese for Bilingual Speakers I	100
CHIN 11200	First-Year Chinese for Bilingual Speakers II	100
CHIN 11300	First-Year Chinese for Bilingual Speakers III	100
CHIN 20100	Intermediate Modern Chinese I	100
CHIN 20200	Intermediate Modern Chinese II	100
CHIN 20300	Intermediate Modern Chinese III	100
CHIN 20150	Readings in Literary Chinese III	
CHIN 20401	Advanced Modern Chinese I	100
CHIN 20402	Advanced Modern Chinese II	100
CHIN 20403	Advanced Modern Chinese III	100
CHIN 20501	Fourth-Year Modern Chinese I	100
CHIN 20502	Fourth-Year Modern Chinese II	100
CHIN 20503	Fourth-Year Modern Chinese III	100
CHIN 20509	Readings in Literary Chinese II	100
CHIN 20601	Fifth-Year Modern Chinese I	100
CHIN 20602	Fifth-Year Modern Chinese II	100
CHIN 20603	Fifth-Year Modern Chinese III	100
CHIN 20701	Business Chinese I	100
CHIN 20702	Business Chinese II	100
CHIN 20703	Business Chinese III	100
CHIN 20800	Elementary Literary Chinese I	100
CHIN 20900	Elementary Literary Chinese II	100
CHIN 21000	Elementary Literary Chinese III	100
CHIN 21100	Accelerated Modern Chinese for Bilingual Speakers I	100

CHIN 21200	Accelerated Modern Chinese for Bilingual Speakers II	100
CHIN 21300	Accelerated Modern Chinese for Bilingual Speakers III	100
CHIN 30100	Advanced Modern Chinese I	100
CHIN 30200	Advanced Modern Chinese II	100
CHIN 30300	Advanced Modern Chinese III	100
CHIN 31100	Business Chinese I	100
CHIN 31200	Business Chinese II	100
CHIN 31300	Business Chinese III	100
CHIN 41100	Fourth-Year Modern Chinese I	100
CHIN 41200	Fourth-Year Modern Chinese II	100
CHIN 41300	Fourth-Year Modern Chinese III	100
CHIN 51100	Fifth-Year Modern Chinese I	100
CHIN 51200	Fifth-Year Modern Chinese II	100
CHIN 51300	Fifth-Year Modern Chinese III	100
Japanese Courses		
JAPN 10100	Elementary Modern Japanese I	100
JAPN 10200	Elementary Modern Japanese II	100
JAPN 10300	Elementary Modern Japanese III	100
JAPN 20100	Intermediate Modern Japanese I	100
JAPN 20200	Intermediate Modern Japanese II	100
JAPN 20300	Intermediate Modern Japanese III	100
JAPN 20401	Advanced Modern Japanese I	100
JAPN 20402	Advanced Modern Japanese II	100
JAPN 20403	Advanced Modern Japanese III	100
JAPN 20500	Fourth-Year Modern Japanese I	100
JAPN 20600	Fourth-Year Modern Japanese II	100
JAPN 20700	Fourth-Year Modern Japanese III	100
JAPN 30100	Advanced Modern Japanese I	100
JAPN 30200	Advanced Modern Japanese II	100
JAPN 30300	Advanced Modern Japanese III	100
JAPN 30800	Reading Scholarly Japanese I	100
JAPN 30900	Reading Scholarly Japanese II	100
JAPN 31000	Reading Scholarly Japanese III	100
JAPN 40500	Fourth-Year Modern Japanese I	100
JAPN 40600	Fourth-Year Modern Japanese II	100
JAPN 40700	Fourth-Year Modern Japanese III	100
Korean Courses		
KORE 10100	Introduction to the Korean Language I	100
KORE 10200	Introduction to the Korean Language II	100

	KORE 10300	Introduction to the Korean Language III	100
	KORE 20100	Intermediate Korean I	100
	KORE 20200	Intermediate Korean II	100
	KORE 20300	Intermediate Korean III	100
	KORE 20401	Advanced Korean I	100
	KORE 20402	Advanced Korean II	100
	KORE 20403	Advanced Korean III	100
	KORE 22100	Korean Contemporary TV and Language	100
	KORE 22200	Contemporary Korean Society and History through Fiction and Film	100
	KORE 22300	Changing Identity of Contemporary Korean through Film and Literature	100
	KORE 30100	Advanced Korean I	100
	KORE 30200	Advanced Korean II	100
	KORE 30300	Advanced Korean III	100
	KORE 42100	Korean Contemporary TV and Language	100
	KORE 42200	Contemporary Korean Society and History through Fiction and Film	100
	KORE 42300	Changing Identity of Contemporary Korean through Film and Literature	100

### EAST ASIAN LANGUAGES & CIVILIZATIONS - CHINESE COURSES

### CHIN 30100-30200-30300. Advanced Modern Chinese I-II-III.

The goal of this sequence is to help students develop advanced proficiency in reading, listening, speaking, and writing. This sequence emphasizes more advanced grammatical structures. We begin with discussion in Chinese on topics relevant to modern China and then shift to authentic Chinese texts in an effort to better prepare students to deal with original Chinese source materials. Discussion in Chinese required. The class meets for five one-hour sessions a week.

### CHIN 30100. Advanced Modern Chinese I. 100 Units.

Terms Offered: Autumn

Prerequisite(s): CHIN 20300 or placement

Equivalent Course(s): CHIN 20401

#### CHIN 30200. Advanced Modern Chinese II. 100 Units.

Terms Offered: Winter

Prerequisite(s): CHIN 20300 or placement

Equivalent Course(s): CHIN 20402

### CHIN 30300. Advanced Modern Chinese III. 100 Units.

Terms Offered: Spring

Prerequisite(s): CHIN 20300 or placement

Equivalent Course(s): CHIN 20403

### CHIN 30200. Advanced Modern Chinese II. 100 Units.

Terms Offered: Winter

Prerequisite(s): CHIN 20300 or placement

Equivalent Course(s): CHIN 20402

### CHIN 30300. Advanced Modern Chinese III. 100 Units.

Terms Offered: Spring

Prerequisite(s): CHIN 20300 or placement

Equivalent Course(s): CHIN 20403

#### CHIN 31100-31200-31300. Business Chinese I-II-III.

This three-quarter sequence aims at improving overall language skills and introduces business terminology. Students learn about companies and their services and/or products, the stock market, real estate market, insurance, and e-commerce. The class meets for three ninety-minute sessions a week.

### CHIN 31100. Business Chinese I. 100 Units.

Terms Offered: Autumn

Prerequisite(s): CHIN 20300 or placement

Equivalent Course(s): CHIN 20701

### CHIN 31200. Business Chinese II. 100 Units.

Terms Offered: Winter

Prerequisite(s): CHIN 20300 or placement

Equivalent Course(s): CHIN 20702

### CHIN 31300. Business Chinese III. 100 Units.

Terms Offered: Spring

Prerequisite(s): CHIN 20300 or placement

Equivalent Course(s): CHIN 20703

#### CHIN 31200. Business Chinese II. 100 Units.

Terms Offered: Winter

Prerequisite(s): CHIN 20300 or placement

Equivalent Course(s): CHIN 20702

### CHIN 31300. Business Chinese III. 100 Units.

Terms Offered: Spring

Prerequisite(s): CHIN 20300 or placement

Equivalent Course(s): CHIN 20703

### CHIN 33206. Medieval Chinese Visual Cult. 100 Units.

Equivalent Course(s): ARTH 22204, ARTH 32004, CHIN 23206, EALC 23206

# CHIN 41100-41200-41300. Fourth-Year Modern Chinese I-II-III.

This sequence introduces a range of influential literary works and scholarly essays on Chinese cultural and social issues from the 1920s to the 1990s. Students not only expand their vocabulary and knowledge of grammatical structures but also learn sophisticated speaking and writing skills through intensive readings and discussions. The class meets for three one-hour sessions a week.

#### CHIN 41100. Fourth-Year Modern Chinese I. 100 Units.

Terms Offered: Autumn

Prerequisite(s): CHIN 30300 or placement

Equivalent Course(s): CHIN 20501

#### CHIN 41200. Fourth-Year Modern Chinese II. 100 Units.

Terms Offered: Winter

Prerequisite(s): CHIN 30300 or placement

Equivalent Course(s): CHIN 20502

#### CHIN 41300. Fourth-Year Modern Chinese III. 100 Units.

Terms Offered: Spring

Prerequisite(s): CHIN 30300 or placement

Equivalent Course(s): CHIN 20503

#### CHIN 41200-41300. Fourth-Year Modern Chinese II-III.

#### CHIN 41200. Fourth-Year Modern Chinese II. 100 Units.

Terms Offered: Winter

Prerequisite(s): CHIN 30300 or placement

Equivalent Course(s): CHIN 20502

#### CHIN 41300. Fourth-Year Modern Chinese III. 100 Units.

Terms Offered: Spring

Prerequisite(s): CHIN 30300 or placement

Equivalent Course(s): CHIN 20503

#### CHIN 41300. Fourth-Year Modern Chinese III. 100 Units.

Terms Offered: Spring

Prerequisite(s): CHIN 30300 or placement

Equivalent Course(s): CHIN 20503

## CHIN 51100-51200-51300. Fifth-Year Modern Chinese I-II-III.

This sequence is designed to prepare students for academic research and activities in a Chinese language environment. Modern classic essays, documentary film and TV broadcasts will be included among the teaching materials. Students will learn not only general listening, speaking and reading skills but also academic writing. Class meets for three one-hour sessions each week. Students can arrange two additional one-on-one tutorial sessions to prepare for assigned language projects.

#### CHIN 51100. Fifth-Year Modern Chinese I. 100 Units.

Terms Offered: Autumn

Prerequisite(s): CHIN 41300 or placement

Equivalent Course(s): CHIN 20601

#### CHIN 51200. Fifth-Year Modern Chinese II. 100 Units.

Terms Offered: Winter

Prerequisite(s): CHIN 51100 or placement

Equivalent Course(s): CHIN 20602

#### CHIN 51300. Fifth-Year Modern Chinese III. 100 Units.

Terms Offered: Winter

Prerequisite(s): CHIN 51200 or placement

Equivalent Course(s): CHIN 20603

#### CHIN 51200-51300. Fifth-Year Modern Chinese II-III.

#### CHIN 51200. Fifth-Year Modern Chinese II. 100 Units.

Terms Offered: Winter

Prerequisite(s): CHIN 51100 or placement

Equivalent Course(s): CHIN 20602

#### CHIN 51300. Fifth-Year Modern Chinese III. 100 Units.

Terms Offered: Winter

Prerequisite(s): CHIN 51200 or placement

Equivalent Course(s): CHIN 20603

#### CHIN 51300. Fifth-Year Modern Chinese III. 100 Units.

Terms Offered: Winter

Prerequisite(s): CHIN 51200 or placement

Equivalent Course(s): CHIN 20603

## EAST ASIAN LANGUAGES & CIVILIZATIONS - JAPANESE COURSES

#### JAPN 30100-30200-30300. Advanced Modern Japanese I-II-III.

The third year marks the end of the basic modern language study. Our goal is to help students learn to understand authentic written and spoken materials with reasonable ease. The texts are all authentic materials with some study aids. Classes conducted in Japanese. The class meets for three eighty-minute sessions a week. All courses in this sequence must be taken for a quality grade.

#### JAPN 30100. Advanced Modern Japanese I. 100 Units.

Terms Offered: Autumn

Prerequisite(s): JAPN 20300 or equivalent, or consent of instructor.

Equivalent Course(s): JAPN 20401

#### JAPN 30200. Advanced Modern Japanese II. 100 Units.

Terms Offered: Winter

Prerequisite(s): JAPN 20300 or equivalent, or consent of instructor.

Equivalent Course(s): JAPN 20402

#### JAPN 30300. Advanced Modern Japanese III. 100 Units.

Terms Offered: Spring

Prerequisite(s): JAPN 20300 or equivalent, or consent of instructor.

Equivalent Course(s): JAPN 20403

#### JAPN 30200. Advanced Modern Japanese II. 100 Units.

Terms Offered: Winter

Prerequisite(s): JAPN 20300 or equivalent, or consent of instructor.

Equivalent Course(s): JAPN 20402

#### JAPN 30300. Advanced Modern Japanese III. 100 Units.

Terms Offered: Spring

Prerequisite(s): JAPN 20300 or equivalent, or consent of instructor.

Equivalent Course(s): JAPN 20403

## JAPN 30800-30900-31000. Reading Scholarly Japanese I-II-III.

This course focuses on the reading of scholarly Japanese materials with the goal of enabling students to do independent research in Japanese after the course's completion. The materials are selected from a wide range of disciplines covering the past three centuries

#### JAPN 30800. Reading Scholarly Japanese I. 100 Units.

Terms Offered: Autumn

Prerequisite(s): JAPN 20300 or equivalent, or consent of instructor.

#### JAPN 30900. Reading Scholarly Japanese II. 100 Units.

Terms Offered: Winter

Prerequisite(s): JAPN 20300 or equivalent, or consent of instructor.

## JAPN 31000. Reading Scholarly Japanese III. 100 Units.

Terms Offered: Spring

Prerequisite(s): JAPN 20300 or equivalent, or consent of instructor.

#### JAPN 30900. Reading Scholarly Japanese II. 100 Units.

Terms Offered: Winter

Prerequisite(s): JAPN 20300 or equivalent, or consent of instructor.

#### JAPN 31000. Reading Scholarly Japanese III. 100 Units.

Terms Offered: Spring

Prerequisite(s): JAPN 20300 or equivalent, or consent of instructor.

#### JAPN 34001. Love and Eros: Japanese History. 100 Units.

Equivalent Course(s): GNSE 24001, GNSE 34001, HIST 24001, HIST 34001, JAPN 24001

#### JAPN 35506. Gender and Japanese History. 100 Units.

This course explores issues of gender within Japanese history from ancient to modern times, with a focus on the period from the eighteenth to the twentieth centuries.

Instructor(s): S. Burns Terms Offered: Spring

Equivalent Course(s): EALC 25506,GNSE 24701,GNSE 34700,JAPN 25506,HIST

34802.HIST 24802

#### JAPN 40500-40600-40700. Fourth-Year Modern Japanese I-II-III.

This course is intended to improve Japanese reading, speaking, writing, and listening ability to the advanced high level as measured by the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency Guidelines. Weekly assignments require students to tackle modern Japanese texts of varying length and difficulty. Organized around a range of thought-provoking themes (from brain death and organ transplants to Japanese values on work and religion), reading assignments include academic theses in psychology and anthropology, literary texts, and popular journalism. After each reading, students are encouraged to discuss the topic in class. Videos/DVDs are used to improve listening comprehension skills. There are also writing assignments. The class meets for two eighty-minute sessions a week.

#### JAPN 40500. Fourth-Year Modern Japanese I. 100 Units.

Terms Offered: Autumn

Prerequisite(s): JAPN 30300 or equivalent

Equivalent Course(s): JAPN 20500

## JAPN 40600. Fourth-Year Modern Japanese II. 100 Units.

Terms Offered: Winter

Prerequisite(s): JAPN 30300 or equivalent

Equivalent Course(s): JAPN 20600

#### JAPN 40700. Fourth-Year Modern Japanese III. 100 Units.

Terms Offered: Spring

Prerequisite(s): JAPN 30300 or equivalent

Equivalent Course(s): JAPN 20700

#### JAPN 40600. Fourth-Year Modern Japanese II. 100 Units.

Terms Offered: Winter

Prerequisite(s): JAPN 30300 or equivalent

Equivalent Course(s): JAPN 20600

#### JAPN 40700. Fourth-Year Modern Japanese III. 100 Units.

Terms Offered: Spring

Prerequisite(s): JAPN 30300 or equivalent

Equivalent Course(s): JAPN 20700

# EAST ASIAN LANGUAGES & CIVILIZATIONS - KOREAN COURSES KORE 30100-30200-30300. Advanced Korean I-II-III.

This course introduces a wide selection of authentic reading materials from Korean newspaper articles, college-level textbooks, and literary prose as an entry point to discuss topics and issues in Korean society, culture, and history. The primary objective is further enhancement of advanced reading comprehension, composition writing, and presentational skills. In addition, Chinese character (Hanja) lessons are incorporated into each lesson with the purpose of expanding vocabulary to the advanced level. The class meets for two eighty-minute sessions a week. All courses in this sequence must be taken for a quality grade.

#### KORE 30100. Advanced Korean I. 100 Units.

Terms Offered: Autumn

Prerequisite(s): KORE 20300 or equivalent, or consent of instructor.

Equivalent Course(s): KORE 20401

#### KORE 30200. Advanced Korean II. 100 Units.

Terms Offered: Winter

Prerequisite(s): KORE 20300 or equivalent, or consent of instructor.

Equivalent Course(s): KORE 20402

#### KORE 30300. Advanced Korean III. 100 Units.

Terms Offered: Spring

Prerequisite(s): KORE 20300 or equivalent, or consent of instructor.

Equivalent Course(s): KORE 20403

#### KORE 30200. Advanced Korean II. 100 Units.

Terms Offered: Winter

Prerequisite(s): KORE 20300 or equivalent, or consent of instructor.

Equivalent Course(s): KORE 20402

#### KORE 30300. Advanced Korean III. 100 Units.

Terms Offered: Spring

Prerequisite(s): KORE 20300 or equivalent, or consent of instructor.

Equivalent Course(s): KORE 20403

#### KORE 42100. Korean Contemporary TV and Language. 100 Units.

KORE 42100 is a content-based language course designed to meet the needs of high-advanced level students of Korean, including international/heritage language students who have studied in Korea up to the primary school levels. We study and analyze genres of Korean TV programs on the internet (e.g., such dramas as soap operas and sitcoms, entertainment talk shows, children's shows, news programs). Main discussion topics are sociolinguistics and socio-cultural issues (e.g., speech levels, honorifics and address terms, language and gender, pragmatics and speech acts, language and nationalism).

Terms Offered: Autumn

Prerequisite(s): KORE 30300 or equivalent, or consent of instructor.

Equivalent Course(s): KORE 22100

# KORE 42200. Contemporary Korean Society and History through Fiction and Film. 100 Units.

KORE 42200 is a content-based language course designed to meet the needs of high-advanced level students of Korean, including international/heritage language students who have studied in Korea up to the primary school levels. We analyze cultural and historical issues in contemporary Korea through four contemporary short novels and related film and media. Other goals are to foster fluency, accuracy, and comprehension in reading authentic contemporary texts, as well as advancing language skills for formal presentation, discussion, and writing.

Terms Offered: Winter

Prerequisite(s): KORE 30300 or equivalent, or consent of instructor.

Equivalent Course(s): KORE 22200

# KORE 42300. Changing Identity of Contemporary Korean through Film and Literature. 100 Units.

KORE 42300 is a content-based language course designed to meet the needs of high-advanced level students of Korean, including international/heritage language students who have studied in Korea up to the primary school levels. In particular, we deal with how contemporary Korean society can be understood through the diverse perspectives of emergent minority groups. Topics include Korean language and identity, gender and sexuality, and Korea as a multi-ethnic society. Class activities include watching contemporary films featuring minorities in Korea. We also read essays written by minorities (e.g., Korean-Japanese, Russian-Korean) and Korean social activists. Student are encouraged to foster their own views on contemporary social issues through diverse activities of discussion, debate, presentation, and writing.

Terms Offered: Spring

Prerequisite(s): KORE 30300 or equivalent or equivalent or consent of instructor

Equivalent Course(s): KORE 22300

#### EAST ASIAN LANGUAGES & CIVILIZATIONS COURSES

#### EALC 30101. Skills and Methods in Chinese Painting History. 100 Units.

This course aims to provide groundwork skills for conducting primary research in Chinese painting history. Emphasis will be on sinological tools and standard resources relevant to the study of early periods, especially the Song and Yuan Dynasty. To develop proficiencies in analyzing materials (silk, paper, mounting, ink, color) and investigating provenance (identifying seals, inscriptions). To gain familiarity with the scholarship on issues of connoisseurship, authenticity, and quality judgment. Weekly task-based reports. Final research paper.

Instructor(s): P. Foong Terms Offered: Autumn

Equivalent Course(s): ARTH 22609, ARTH 32609, EALC 20101

#### EALC 31851. Zhuangzi: Lit, Phil, or Something Else. 100 Units.

The early Chinese book attributed to Master Zhuang seems to be a patchwork of fables, polemical discussions, arguments, examples, riddles, and lyrical utterances. Although it has been central to the development of both religious Daoism and Buddhism, the book is alien to both traditions. This course offers a careful reading of the work with some of its early commentaries. Requirement: classical Chinese.

Instructor(s): H. Saussy Terms Offered: Winter Prerequisite(s): Requirement: classical Chinese

Equivalent Course(s): CMLT 21851,FNDL 22306,CMLT 31851

# EALC 33210. Spells, Talismans, Alchemy, Zen: Language and Religious Practice in China and Japan. 100 Units.

We will explore pictures of the efficacies of ritual language featured across a range of East Asian religious practices. Sources examined will include religious scriptures, commentaries, ritual manuals, and art; philosophical, alchemical, and magical treatises; works of traditional poetics; Chan and Zen discourse records and essays; and a range of modern theorists of language, nonsense, and religion. All works will be in English. We will consider questions such as: why do some ritual utterances center passages in obscure foreign languages, or even simple nonsense? Why do some religious practices feature claims for the absolute accuracy, profundity, and magical potencies of scriptural language, while others are at least in part based on the idea that all language, in every way, always fails? Why are some religious texts written such that they seem not to mean what they say? Can a mere painting of a cake offer nourishment?

Instructor(s): P. Copp Terms Offered: Spring

Equivalent Course(s): EALC 23210

#### EALC 34410. Kurosawa and His Sources. 100 Units.

This interdisciplinary graduate course focuses on ten films of Akira Kurosawa which were based on literary sources, raging from Ryunosuke Akutagawa, Jules Dassin, Georges Simenon, and Shakespeare to Dostoevsky, Tolstoy, Gorky, and Arseniev. The course will not only introduce to some theoretical and intermedial problems of adaptation of literature to film but also address cultural and political implications of Kurosawa's adaptation of classic and foreign sources. We will study how Kurosawa's turn to literary adaptation provided a vehicle for circumventing social taboos of his time and offered a screen for addressing politically sensitive and sometimes censored topics of Japan's militarist past, war crimes, defeat in the Second World War, and ideological conflicts of reconstruction. The course will combine film analysis with close reading of relevant literary sources, contextualized by current work of political, economic, and cultural historians of postwar Japan. The course is meant to provide a hands-on training in the interdisciplinary methodology of Comparative Literature. Undergraduate students can be admitted only with the permission of the instructor. Prerequisites: Intro to Film or Close Analysis of Film class.

Instructor(s): Olga Solovieva Terms Offered: Winter

Note(s): Course limited to 10 participants.

Equivalent Course(s): CMLT 34410

#### EALC 34500. Reading Qing Documents. 100 Units.

Reading and discussion of nineteenth- and early twentieth-century historical political documents, including such forms as memorials, decrees, local gazetteers, diplomatic communications, essays, and the like.

Instructor(s): G. Alitto Terms Offered: Winter

Equivalent Course(s): HIST 24500, EALC 24500, HIST 34500

#### EALC 34607. Chinese Independent Documentary Film. 100 Units.

This course explores the styles and functions of Chinese independent documentary since 1989, with particular attention to the social and political contexts that underpin its flourishing in Mainland China and Taiwan. We will discuss the ways in which recent Chinese documentaries challenge current theories of the genre, how they redefine the relationship between fiction and non-fiction, and the problems of media aesthetics, political intervention, and ethics of representation that they pose. We will look at their channels of circulation in Asia and elsewhere, and will discuss the implications and limits of the notion of independence. Readings will include theorizations of the documentary genre in relation to other visual media and narrative forms, analyses of specific works, and discussions on the impact of digital media.

Instructor(s): P. Iovene Terms Offered: Spring

Equivalent Course(s): EALC 24607

#### EALC 34710. Japan and the World in 19th Century Art. 100 Units.

This seminar will explore artistic interaction between Japan and the West in the late 19th century. Topics include: changing European and American views of Japan and its art, the use of Japanese pictorial "sources" by artists such as Monet and Van Gogh, Japan's invocation by decorative arts reformers, Japanese submissions to the world's fairs, and new forms of Japanese art made for audiences within Japan. Class sessions and a research project are designed to offer different geographical and theoretical perspectives and to provide evidence of how Japonisme appeared from late 19th-century Japanese points of view.

Instructor(s): C. Foxwell Terms Offered: Spring

Equivalent Course(s): ARTH 24710, ARTH 34710, EALC 24710

#### EALC 34807. History of Japanese Philosophy. 100 Units.

What is philosophy and why does looking at Japanese philosophy make a difference? By examining Buddhist, Confucian, Shinto, and modern academic philosophical traditions, this course will provide a history of ideas found in Japan and central to thinking about being/non-being, government, ethics, aesthetics, economics, faith, and practice.

Instructor(s): J. Ketelaar Terms Offered: Autumn

Equivalent Course(s): EALC 24807, HIST 34806, HIST 24806

#### EALC 34900. The Art of Ancestral Worship. 100 Units.

For course description contact Art History.

Equivalent Course(s): ARTH 20100, ARTH 30100, EALC 24900, RLST 27600

# EALC 36001. Anyang: History of Research of the Last Shang Dynasty Capital. 100 Units.

Instructor(s): Li Terms Offered: Autumn Equivalent Course(s): EALC 26001

#### EALC 36201. Medicine and Culture in Modern East Asia. 100 Units.

This course will focus on the cultural history of medicine in China, Japan, and Korea from the mid-nineteenth century to the 1980s. We will be concerned with tracing the circulation of new medical knowledge and understanding its cultural and social implications. Topics to be explored include the introduction of "Western medicine" and its impact for "traditional" medicine, the struggles over public health, gender, medicine, and modernity, consumer culture, and medicine. No knowledge of an East Asian language is required, but those with reading skills will be encouraged to utilize them.

Instructor(s): S. Burns Terms Offered: Winter

Equivalent Course(s): EALC 26201, HIST 34206, HIST 24206

#### EALC 36500. The Shi Jing: Classic of Poetry. 100 Units.

Instructor(s): E. Shaughnessy Terms Offered: Winter

Equivalent Course(s): EALC 26500

#### EALC 36601. East Asian Languages, Acquisition and Pedagogy. 100 Units.

This course will address significant issues in teaching and learning an East Asian language through identification and analysis of specific sociolinguisitic and linguistic characteristics of Korean, Japanese, and Chinese. The course will begin with the introduction of linguistic structures of the three East Asian languages to begin discussing the interaction between language acquisition and society. Then, we will explore sociolinguistic issues common to the three languages that underlie the linguistic diversity (and similarities) of East Asia, such as the following topic: (i) the use of Chinese characters, the history of writing reform, and its relation to literacy in East Asian languages; (ii) loan words in East Asian languages, in particular, the use of Chinese characters in modern Japanese and Korean in age of colonialism; (iii) the development and use of honorifics in China, Japan, and Korea, etc. For a comparative approach and perspective to these topics, students will read academic papers for each language on a given topic and discuss the unique sociolinguistic features of each language. Such an approach will allow us to analyze the language influence and interaction among the three languages and how that shapes the culture, society, and language acquisition. Finally, this course will also introduce the field of second language acquisition focusing on how social factors influence L2 learning and acquisition.

Instructor(s): H. Kim Terms Offered: Winter

Equivalent Course(s): LING 29601, LING 39601, EALC 26601

#### EALC 37708. Feminine Space in Chinese Art. 100 Units.

"Feminine space" denotes an architectural or pictorial space that is perceived, imagined, and represented as a woman. Unlike an isolated female portrait or an individual female symbol, a feminine space is a spatial entity: an artificial world composed of landscape, vegetation, architecture, atmosphere, climate, color, fragrance, light, and sound, as well as selected human occupants and their activities. This course traces the construction of this space in traditional Chinese art (from the second to the eighteenth centuries) and the social/political implications of this constructive process.

Instructor(s): Wu Hung Terms Offered: Spring

Equivalent Course(s): ARTH 39400, EALC 27708, ARTH 29400

# EALC 38400. Communities, Media and Selves in Modern Chinese Literature. 100 Units.

This course examines the ways in which authors, editors, and public intellectuals redefined the social function of literature and sought to build communities of readers in early 20th century China. We will combine close readings of texts with a survey of important institutions and concepts, familiarizing ourselves with the literary circles and associations, the journals and publishers, and the notions of self and community that shaped literary practices in a tumultuous period. How are we to rethink the relationship between literary writing—per se a highly individualized and often solitary activity—with the forms of sociality, collaborative practices, and global networks of translation in which it was historically embedded? What are the visions of community that the texts themselves sought to promote? What are, in the final analysis, the relevant contexts for the study of modern Chinese literature? Our explorations will be both historical and historiographical, and will touch on the main debates that shape modern Chinese literary studies today.

Instructor(s): Iovene Terms Offered: Winter

Equivalent Course(s): EALC 28400

#### EALC 38411. Thought Reform and Social Control in the PRC. 100 Units.

Building up on fascinating recent research on thought reform, social control, reeducation, spycraft, and police work in the early PRC, we will examine how the new state sought to mold and reeducate its people. We will begin by reading some of the recent English language literature and then move on to read self-criticisms, confessions, petitions, denunciation letters, and police reports in Chinese. Third year Chinese or equivalent is required.

Instructor(s): J. Eyferth Terms Offered: Autumn

Prerequisite(s): Third-year Chinese

Equivalent Course(s): HIST 27411, HIST 37411, EALC 28411

#### EALC 38600. Contemporary Chinese Literature. 100 Units.

Instructor(s): P. Iovene Terms Offered: Winter

Equivalent Course(s): EALC 28600

# EALC 39401. The Ghost Tradition in Chinese Literature, Opera, and Film. 100 Units.

What is a ghost? How and why are ghosts represented in particular forms in a particular culture at particular historical moments? This course will explore the complex meanings, both literal and figurative, of ghosts and spirits in Chinese culture across a range of genres: the ghost story, opera, visual imagery, and film. Issues to be explored include: 1) the confrontation of individual mortality and collective anxieties over the loss of the historical past; 2) the relationship between the supernatural, gender, and sexuality; 3) the visualization of ghosts and spirits in art, theater, and cinema; 4) the politics of ghosts in modern times. Course readings will be in English translation, and no prior background is required, but students who read Chinese will be encouraged to work with sources in the original. This year's class will be designed to take full advantage of special Chicago events in spring 2014, notably the exhibition "Performing Images: Opera in Chinese Visual Culture" at the Smart Museum and Mary Zimmerman's new production of *The White Snake* at the Goodman Theatre.

Instructor(s): J. Zeitlin Terms Offered: Spring

Equivalent Course(s): TAPS 28491, GNSE 29401, GNSE 39401, EALC 29401

#### EALC 40456. Media, History, East Asia. 100 Units.

This seminar serves as an introduction to theories of media and mediation in the context of scholarship on East Asia. "Media" has come to be a ubiquitous term in how we think not just about technologies of communication and dissemination, but also about literature, music, film, and other forms of cultural production. In this course we will look at how the concept has been taken up in recent work on China, Japan, and Korea, and raise questions about how this work has drawn on media theories from elsewhere; how it has sought to develop or recover locally inflected theories of media; and how it is we might distinguish between the two. Our task, then, will be to consider how media theory and media history have been done, but also to speculate on how they can and should be done within an area studies framework.

Instructor(s): Long Terms Offered: Winter

Note(s): Grad students only

#### EALC 40500. Sem: Mod Chinese Hist 1. Units.

During the first quarter, students begin defining and researching their seminar paper topic and become acquainted with the secondary literature and primary sources of the area of their research. During the winter quarter, students write a paper on defined topic, based on the secondary literature and primary sources studied during the autumn. The seminar meets every week to discuss the progress of each student's paper.

Instructor(s): G. Alitto Terms Offered: Autumn Prerequisite(s): Reading knowledge of Chinese

Equivalent Course(s): HIST 76001

#### EALC 40501. Sem: Mod Chinese Hist 2. Units.

The second quarter focuses on the writing of a seminar paper. See HIST 76001, part 1 course description.

Instructor(s): G. Alitto Terms Offered: Winter

Prerequisite(s): HIST 76001, part 1 Equivalent Course(s): HIST 76002

#### EALC 40508. Readings in Literary Chinese I. 100 Units.

Note(s): Not offered every year; quarters vary. Equivalent Course(s): EALC 20508,CHIN 20508

#### EALC 40509. Readings in Literary Chinese II. 100 Units.

Note(s): Not offered every year; quarters vary. Equivalent Course(s): EALC 20509,CHIN 20509

#### EALC 40510. Readings in Literary Chinese III. Units.

Note(s): Not offered every year; quarters vary. Equivalent Course(s): EALC 20510,CHIN 20150

#### EALC 41455. Peach Blossom Fan. 100 Units.

This course will concentrate on reading *Peach Blossom Fan*, Kong Shangren's (1648–1718) masterpiece of historical drama, in the original Chinese. Issues to be explored include the early Qing reassessment of late Ming entertainment culture as part of a commemoration of the fallen dynasty; antiquarianism, material culture, and the reenactment of the past on the stage; contextualizing Kong Shangren's dramatic oeuvre within the early Qing literary and theatrical world.

Instructor(s): J. Zeitlin Terms Offered: Spring Prerequisite(s): Command of Literary Chinese

#### EALC 42101. Sem: Mod Korean Hist 2. Units.

The second quarter focuses on the writing of a seminar paper. See HIST 75601, part 1 course description.

Instructor(s): B. Cumings Terms Offered: Winter

Prerequisite(s): HIST 75601, part 1 Equivalent Course(s): HIST 75602

#### EALC 42400. Sem: Mod Korean Hist 1. Units.

By modern, we mean Korea since its "opening" in 1876. We read about one book per week in the autumn. Before each session one student will write a 3-4 page paper on the reading, with another student commenting on it. In the winter, students present the subject, method, and rationale for a significant research paper. Papers should be about forty pages and based in primary materials; ideally this means Korean materials, but ability to read scholarly materials in Korean, Japanese, or Chinese is not a requirement for taking the seminar. Students may also choose a comparative and theoretical approach, examining some problems in modern Korean history in the light of similar problems elsewhere, or through the vision of a body of theory. Instructor(s): B. Cumings Terms Offered: Autumn

Equivalent Course(s): HIST 75601

#### EALC 42512. The Painter's Project in Japan, 1750-1930. 100 Units.

This course examines the varied and changing positions of the painter in Japan from the 18th through early 20th centuries. We will consider approaches to the negotiation of artistic selfhood, historical consciousness, copying and the archive, tropes of originality and eccentricity, as well as limitations placed on painters based on gender, socioeconomic background, and region. Painters under investigation include Jakuchu, Hokusai, Takahashi Yuichi, Kyosai, Uemura Shoen, Foujita, Kishida Ryusei, and early Japanese-American artists. Students interested in pursuing comparative work between Japan and another region are encouraged to do so.

Instructor(s): C. Foxwell Terms Offered: Winter

Equivalent Course(s): ARTH 42512

#### EALC 42609. Seminar: Japanese Handscroll Paintings. 100 Units.

For course description contact Art History.

Equivalent Course(s): ARTH 44909

## EALC 42610. Imperial Collections of Chinese Painting & Calligraphy. 100 Units.

For course description contact Art History.

Equivalent Course(s): ARTH 42610

#### EALC 44420. Facism and Japanese Culture. 100 Units.

This course will explore multiple definitions of fascism in relation to modern Japanese culture. We will read works of literature and literary criticism typically identified as fascist, as well as Japanese critiques of fascism, from the 1930s and beyond. We will also read a number of theoretical texts from Japan and elsewhere that analyze fascism as a political and cultural form. Advanced reading knowledge of Japanese is required; a large portion of the course readings will be in Japanese, although some selections will be provided in English.

Instructor(s): Bourdaghs Terms Offered: Spring

Prerequisite(s): Advanced Japanese

Note(s): Grad students only

#### EALC 45530. Manuscript Culture in Ancient and Medieval China. 100 Units.

Thousands of Chinese manuscripts dating between the fifth century B.C. and the tenth century A.D. have been discovered since the beginning of the twentieth century, with new discoveries continuing to the present. This seminar addresses theoretical and methodological approaches to engaging in research on the manuscripts.

Instructor(s): D. Harper, M. Kalinowski Terms Offered: Spring 2013

Prerequisite(s): Consent required

#### EALC 45800. Readings in Chinese Buddhist Texts. 100 Units.

This quarter we will focus on Chan (a.k.a. "Zen") literature, especially the *Linji lu* ("Record of Linji"), one of the central texts of Chan Buddhism. As we study our text, we will also explore the transformations in Chan literature and thought that accompanied the rise of vernacular Chan writings in the Northern Song period (960–1127), in part by comparison with earlier texts in the literary language.

Instructor(s): Copp Terms Offered: Spring

Prerequisite(s): Reading ability in literary Chinese is a requirement.

Note(s): Grad students only

#### EALC 46030. Craft Production in Early China. 100 Units.

Instructor(s): Li Terms Offered: Autumn

#### EALC 48220. Gender in Late Imperial and Republican China. 100 Units.

How did gender norms change from the Qing era to Republican China? In this graduate course, we will read essays by neo-Confucian thinkers (Zhang Xuecheng) and statecraft authors (Cheng Hongmou, Yan Ruyi), legal texts, excerpts from popular handbooks and encyclopedia (on ritual, reproductive health, and everyday life). In the second half of the course, we will read essays by early twentieth-century writers such as Kang Youwei, Liang Qichao, He-Yin Zhen, Qiu Jin, as well as articles from the popular press. Most of the readings will be in Chinese, though we will use translations alongside the originals, if available.

Instructor(s): J. Eyferth

Equivalent Course(s): HIST 56604, GNSE 48220

#### EALC 48501. Manuscripts, Material Culture and Ritual. 100 Units.

This quarter we will focus on Chan (a.k.a. "Zen") literature, especially the Linji lu ("Record of Linji"), one of the central texts of Chan Buddhism. As we study our text, we will also explore the transformations in Chan literature and thought that accompanied the rise of vernacular Chan writings in the Northern Song period (960-1127), in part by comparison with earlier texts in the literary language. # Instructor(s): P. Copp Terms Offered: Winter

Note(s): Reading ability in literary Chinese required.

Equivalent Course(s): HREL 45801

#### EALC 59700. Thesis Research. 100 Units.

For course description contact East Asian Languages. , Terms Offered: ,Autumn Note(s): ,Consent required.

#### EALC 59700. Thesis Research. 100 Units.

For course description contact East Asian Languages.,

Terms Offered: ,Autumn Note(s): ,Consent required.

#### EALC 60000. Reading Course: Special Topic Chinese, Reading Course. 100 Units.

Instructor(s): Arr., Terms Offered: Autumn

Note(s): Consent required.

# EALC 60000. Reading Course: Special Topic Chinese, Reading Course. 100 Units.

Instructor(s): Arr., Terms Offered: Autumn

Note(s): Consent required.

#### EALC 65000. Directed Translation. 100 Units.

For course description contact East Asian Languages.

EALC 70000. Advanced Study: East Asian. Units.

Terms Offered: Autumn Note(s): Consent required.



# DEPARTMENT OF ENGLISH LANGUAGE AND LITERATURE

#### Chair

- Elaine Hadley Professors
- · Lauren G. Berlant
- Bill Brown
- James K. Chandler
- Maud Ellmann
- · Frances Ferguson
- · Leela Gandhi
- Elaine Hadley
- · Loren A. Kruger
- William J. T. Mitchell
- Joshua Keith Scodel
- Kenneth W. Warren Associate Professors
- · Janice Knight
- James Lastra
- John Mark Miller
- Deborah Lynn Nelson
- Lawrence Rothfield
- Lisa C. Ruddick
- Eric Slauter
- Christina von Nolcken Assistant Professors
- Adrienne Brown
- Timothy Campbell
- Hillary Chute
- · Patrick Jagoda
- · Heather Keenleyside
- Benjamin Morgan
- John Muse
- · Srikanth Reddy
- Jennifer Scappettone
- David C. Simon
- Richard So

- Christopher Taylor
- Sonali Thakkar
   Emeritus Faculty
- · David Bevington
- · Elizabeth Helsinger
- George Hillocks, Jr.
- J. Paul Hunter
- Janel Mueller
- Michael J. Murrin
- · Jay Schleusener
- · Richard G. Stern
- Richard Allen Strier
- · Stuart M. Tave
- · William Veeder
- Anthony C. Yu, Divinity Professor of Practice
- John Wilkinson
   Visiting Professors

Postdoctoral Fellows

Graduate students in English work with a distinguished faculty of critics and scholars to develop their own interests over a broad range of traditional and innovative fields of research. The program aims to attain a wide substantive command of British, American, and other English language literatures. In addition to specializations in the full range of chronologically defined fields, the program includes generous offerings in African American Studies, Latino/a Studies, gender studies, and cinema and other media studies. Students are also trained in textual studies, editing, literary and cultural history, and a variety of critical theories and methodologies. The interests of both faculty and students often carry through to neighboring disciplines like anthropology, sociology, history, art history, linguistics, and philosophy. The University provides a supportive environment for advanced studies of this kind.

## THE DEGREE OF DOCTOR OF PHILOSOPHY

The program leading to the Ph.D. degree aims primarily to prepare students for independent work as teachers, scholars, and critics by developing their abilities to pose and investigate problems in the advanced study of literatures in English and in film. Departmental requirements are designed to lead to the doctorate in five to six years. Course work, the preparation of oral fields examinations, workshops, teaching, and the dissertation introduce students to a variety of textual modes, critical methodologies, and historical/cultural problems; provide extensive practice in research, discussion, argument, and writing; and develop pedagogical skills through supervised teaching. While a student's progress will be carefully monitored and periodically evaluated by individual advisors and the department, all students

will be accepted into the program on the assumption that they will proceed to the Ph.D.

In the first two years of the Ph.D. program, students are required to enroll in six graduate courses each year (including at least two seminars the first year and three the second year). All first-year students also participate in a one-quarter colloquium designed to introduce theoretical and practical questions posed by the study of literature (through readings in a range of theoretical and literary texts). In the autumn of their third year students will also take a one quarter course in various approaches to the teaching of literature and composition.

Note: Students entering with an M.A. degree in English will be asked to complete at least one year of coursework (six courses, including at least three seminars) plus two additional courses in their second year, participate in the fall quarter colloquium, and take the fall quarter course on teaching in either their second or third years.

Students in their third and fourth years will normally teach at least one quarterlong course each year: initially as course assistants in departmental courses for undergraduates; then as lecturers in the departmental methods and issues course for majors; as bachelor's paper supervisors; or as instructors in courses of their own design. Students may also be employed as writing tutors, assistants in introductory humanities and social sciences core courses, instructors in the College Writing Program course in expository writing (which provides its own training in the teaching of composition), or as teachers at other area colleges and universities. The department believes that both training and experience in teaching is an important part of the graduate program.

#### THE DEGREE OF MASTER OF ARTS

Students seeking a master's degree should apply to the Master of Arts Program in the Humanities (MAPH), a three-quarter program of interdisciplinary study in a number of areas of interest to students, including literature and film. MAPH permits students to take almost all of their courses in the English Department, sharing classes with students in the Ph.D. program. The resulting degree is equivalent to a master's in English. Further details about the MAPH program are available at http://maph.uchicago.edu/

# **INQUIRIES**

For more information on the department's programs and requirements, please see the Department of English website at http://english.uchicago.edu/ or call the Department Coordinator, at (773) 702-8537.

#### Information on how to apply

The application process for admission and financial aid for all graduate programs in the Humanities is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online at: http://humanities.uchicago.edu/prospective/admissions.html.

Questions pertaining to admissions and aid should be directed to humanitiesadmissions@uchicago.edu or (773) 702-1552.

International students must provide evidence of English proficiency by submitting scores from either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS). (Current minimum scores, etc., are provided with the application.) For more information, please see the Office of International Affairs website at https://internationalaffairs.uchicago.edu/, or call them at (773) 702-7752.

### **ENGLISH LANGUAGE & LITERATURE COURSES**

#### ENGL 30220. British Poetry of the Long 1930s. 100 Units.

W. H. Auden dominated the poetic landscape of his time and his influence has been powerfully felt in later English and American poetry. Less celebrated British poetry of the 1930s and early 1940s offers a fascinating range of modernist and counter-modernist aesthetic strategies negotiating political crisis. This course will encounter Marxist, Scottish nationalist, quasi-Fascist, Surrealist, collage, feminist, and proletarian poets. The poetic response to the Spanish Civil War will be a special focus. **(C, G)** 

Instructor(s): J. Wilkinson Terms Offered: Autumn Equivalent Course(s): ENGL 20220

#### ENGL 31000. History and Theory of Drama I. 100 Units.

The course is a survey of major trends and theatrical accomplishments in drama from the ancient Greeks through the Renaissance: Aeschylus, Sophocles, Euripides, Aristophanes, classical Sanskrit theater, medieval religious drama, Japanese Noh drama, Kyd, Marlowe, Shakespeare, and Molière, along with some consideration of dramatic theory by Aristotle, Sir Philip Sidney, Corneille, and others. Students have the option of writing essays or putting on short scenes in cooperation with other members of the course. The goal of these scenes is not to develop acting skill but, rather, to discover what is at work in the scene and to write up that process in a somewhat informal report. End-of-week workshops, in which individual scenes are read aloud dramatically and discussed, are optional but highly recommended. (D, E)

Instructor(s): D. Bevington Terms Offered: Autumn

Prerequisite(s): Preference given to students with third- or fourth-year standing. Note(s): May be taken in sequence with ENGL 13900/31100 or individually. This course meets the general education requirement in the dramatic, musical, and visual arts.

Equivalent Course(s): ENGL 13800,CLAS 31200,CLCV 21200,CMLT 20500,CMLT 30500,TAPS 28400

#### ENGL 31100. History and Theory of Drama II. 100 Units.

This course is a survey of major trends and theatrical accomplishments in Western drama from the eighteenth century into the twentieth (i.e., Sheridan, Ibsen, Chekhov, Strindberg, Wilde, Shaw, Brecht, Beckett, Pinter, Stoppard, Churchill, Kushner). Attention is also paid to theorists of the drama (e.g., Stanislavsky, Artaud, Grotowski). Students have the option of writing essays or putting on short scenes in cooperation with other members of the course. The goal of these scenes is not to develop acting skill but, rather, to discover what is at work in the scene and to write up that process in a somewhat informal report. End-of-week workshops, in which individual scenes are read aloud dramatically and discussed, are optional but highly recommended. (D, G)

Instructor(s): D. Bevington, H. Coleman Terms Offered: Winter

Prerequisite(s): Third- or fourth-year standing

Note(s): May be taken in sequence with ENGL 13800/31000 or individually. This course meets the general education requirement in the dramatic, musical, and visual arts.

Equivalent Course(s): ENGL 13900, CMLT 20600, CMLT 30600, TAPS 28401

#### ENGL 32700. Writing Biography. 100 Units.

Prerequisite(s): To apply, submit writing through online form at

creativewriting.uchicago.edu/courses/submission.

Note(s): Attendance on the first day is mandatory.

Equivalent Course(s): CRWR 26001, CRWR 46001, ENGL 12700

#### ENGL 32800. Theories of Media. 100 Units.

This course will explore the concept of media and mediation in very broad terms, looking not only at modern technical media and mass media, but at the very idea of a medium as a means of communication, a set of institutional practices, and a habitat" in which images proliferate and take on a "life of their own." The course will deal as much with ancient as with modern media, with writing, sculpture, and painting as well as television and virtual reality. Readings will include classic texts such as Plato's Allegory of the Cave and Cratylus, Aristotle's Poetics, and such modern texts as Marshall McLuhan's Understanding Media, Regis Debray's Mediology, and Friedrich Kittler's Gramophone, Film, Typewriter. We will explore questions such as the following: What is a medium? What is the relation of technology to media? How do media affect, simulate, and stimulate sensory experiences? What sense can we make of such concepts as the "unmediated" or "immediate"? How do media become intelligible and concrete in the form of "metapictures" or exemplary instances, as when a medium reflects on itself (films about films, paintings about painting)? Is there a system of media? How do we tell one medium from another, and how do they become "mixed" in hybrid, intermedial formations? We will also look at such recent films as The Matrix and Existenz that project fantasies of a world of total mediation and hyperreality. Students will be expected to do one "show and tell" presentation introducing a specific medium. There will also be several short writing exercises, and a final paper. (H)

Instructor(s): W. J. T. Mitchell Terms Offered: Winter

Equivalent Course(s): ENGL 12800,AMER 30800,ARTH 25900,ARTH 35900,ARTV 25400,CMST 27800,CMST 37800

# ENGL 33000. Academic and Professional Writing (The Little Red Schoolhouse) 100 Units.

Instructor(s): L. McEnerney, K. Cochran, T. Weiner Terms Offered: Winter, Spring Prerequisite(s): Third- or fourth-year standing

Note(s): This course does not count towards the ISHU program requirements. May be taken for P/F grading by students who are not majoring in English. Materials fee \$20.

Equivalent Course(s): ISHU 23000, ENGL 13000

## ENGL 33525. Immigration and Deregulation in Recent British Fiction. 100 Units.

This course looks at the impact on British fiction of the two most powerful forces transforming British life from the 1950s to the present—mass immigration and financial deregulation. The period covered will be that of Thatcher's governments and their extended aftermath. Core novels are *White Teeth* and *NW* by Zadie Smith, *Brick Lane* by Monica Ali, *Money* and *London Fields* by Martin Amis, and *Capital* by John Lanchester. **(B)** 

Instructor(s): J. Wilkinson Terms Offered: Winter

Equivalent Course(s): ENGL 23100

#### ENGL 33637. Joyce's Ulysses: An Introduction. 100 Units.

This course consists of a chapter-by-chapter introduction to *Ulysses*. We will focus on such themes as the city, aesthetics, politics, sex, food, religion, and the family, while paying close attention to Joyce's use of multiple narrators and styles. Students are strongly encouraged to read Joyce's *A Portrait of the Artist as a Young Man* and Homer's *Odyssey* as preparation for this course. Assignments will consist of biweekly quizzes, collaborative class presentations, regular contributions to the class blog, and 2–3 papers. Students are also required to attend the sessions on *Ulysses* at the conference on Forms of Fiction on November 7–9, 2013. **(B, G)** 

Instructor(s): M. Ellmann Terms Offered: Autumn

Equivalent Course(s): ENGL 24002

#### ENGL 34319. Picturing Words/Writing Images (Studio) 100 Units.

What is the relationship between reading and looking? Images in mind and images on paper—words in mind and on the page—we will explore the intersection of these different ways to think, read, and look, as we make poems, drawings, paintings, etc., in class. We will investigate the problem of representing language as it is expressed in the work produced in class. Studying works by contemporary visual artists like Jenny Holzer and Ann Hamilton, and practicing poets such as Susan Howe and Tom Phillips will inform our investigation. The course will feature visits to our studio by contemporary poets and visual artists, who will provide critiques of student work and discussion of their own ongoing projects. These visitors will help to frame our artistic and literary practice within the ongoing conversation between word and image in modern culture. We will ask, what are the cognitive, phenomenological, social, and aesthetic consequences of foregrounding the pictorial/visual aspect of alphabetical characters? (C, H)

Instructor(s): J. Stockholder, S. Reddy Terms Offered: Autumn

Prerequisite(s): Third- or fourth-year standing. Previous experience in an arts studio or creative writing course recommended, but not required.

Equivalent Course(s): BPRO 26500,ARTV 26901,ARTV 36901,CRWR 26341,CRWR 46341,ENGL 24319

#### ENGL 34407. Critique of Humanism. 100 Units.

This course will provide a rapid-fire survey of the philosophical sources of contemporary literary and critical theory. We will begin with a brief discussion of the sort of humanism at issue in the critique—accounts of human life and thought that treat the individual human being as the primary unit for work in the humanities and the humanistic social sciences. This kind of humanism is at the core of contemporary common sense. It is, to that extent, indispensable in our understanding of how to move around in the world and get along with one another. That is why we will conduct critique, rather than plain criticism, in this course: in critique, one remains indebted to the system under critical scrutiny, even while working to understand its failings and limitations. Our tour of thought produced in the service of critique will involve work by Hegel, Marx, Gramsci, Freud, Fanon, Lacan, and Althusser. We will conclude with a couple of pieces of recent work that draws from these sources. The aim of the course is to provide students with an opportunity to engage with some extraordinarily influential work that continues to inform humanistic inquiry.

Instructor(s): C. Vogler Terms Offered: Spring

Equivalent Course(s): PHIL 21225, ENGL 12002, PHIL 31225

#### ENGL 34900. Old English. 100 Units.

This course is designed to prepare students for further study in Old English language and literature. As such, our focus will be the acquisition of those linguistic skills needed to encounter such Old English poems as *Beowulf, The Battle of Maldon*, and *The Wanderer* in their original language. In addition to these texts, we may also translate the prose *Life of Saint Edmund, King and Martyr* and such shorter poetic texts as the Exeter Book riddles. We will also survey Anglo-Saxon history and culture, taking into account the historical record, archeology, manuscript construction and illumination, and the growth of Anglo-Saxon studies as an academic discipline. This course serves as a prerequisite both for further Old English study at the University of Chicago and for participation in the Newberry Library's Winter Quarter Anglo-Saxon seminar. **(C, E)** 

Instructor(s): C. von Nolcken Terms Offered: Autumn Equivalent Course(s): ENGL 14900,GRMN 34900

#### ENGL 35200. Beowulf. 100 Units.

This course will aim to help students read Beowulf while also acquainting them with some of the scholarly discussion that has accumulated around the poem. We will read the poem as edited in Klaeber's *Beowulf* (4th ed., Univ. of Toronto Press, 2008). Once students have defined their particular interests, we will choose which recent approaches to the poem to discuss in detail; we will, however, certainly view the poem both in itself and in relation to Anglo-Saxon history and culture in general. **(C, E)** 

Instructor(s): C. von Nolcken Terms Offered: Winter

Prerequisite(s): PQ: ENGL 14900/35900 or the equivalent

Note(s): Cross listed courses are designed for advanced undergraduate and graduate students.

Equivalent Course(s): ENGL 15200,FNDL 28100,GRMN 32900

#### ENGL 35902. Virgil, The Aeneid. 100 Units.

A close literary analysis of one of the most celebrated works of European literature. While the text, in its many dimensions, will offer more than adequate material for classroom analysis and discussion, attention will also be directed to the extraordinary reception of this epic, from Virgil's times to ours.

Instructor(s): G. Most Terms Offered: Winter 2013

Prerequisite(s): Latin helpful

Equivalent Course(s): CLAS 44512, CMLT 35902, SCTH 35902

#### ENGL 38703. Movies and Madness. 100 Units.

We propose to investigate representations of madness in fictional, documentary, and experimental film. We divide the topic this way to emphasize the different dimensions of cinematic address to questions of mental illness, and the ways that film genres imply distinct formal and epistemological conventions for the representation of insanity. Documentary ranges from instructional and neutral reportage, to polemical, essayistic interventions in the politics of psychiatry and the asylum, the actual conditions of mental illness in real historical moments. Documentary also includes the tendency in new media for "the mad" to represent themselves in a variety of media. With experimental film, our aim will be to explore the ways that the cinematic medium can simulate experiences of mania, delirium, hallucination, obsession, depression, etc., inserting the spectator into the subject position of madness. We will explore the ways that film techniques such as shotmatching, voice-over, montage, and special effects of audio-visual manipulation function to convey dream sequences, altered states of consciousness, ideational or perceptual paradoxes, and extreme emotional states. Finally, narrative film we think of as potentially synthesizing these two strands of cinematic practice, weaving representations of actual, possible, or probable situations with the special effects of mad subjectivity. Our emphasis with narrative film will be to focus—not simply on the mentally ill subject as hero or monster—but on the institutional situation of madness, its place in a social and disciplinary context. Put simply, we want to consider films that portray both insanity and the sanatorium, both the deranged subject and the asylum, both the madwoman and the (often male) psychiatrist, both the irrational subject and the rational system. The overall aim of the seminar, then, is to raise the question of what movies bring to madness that was not representable in pre-cinematic media such as theater, opera, and literature, and what it was that the subject of madness brought to cinema, not only as a thematic issue but as defining possibility of film form as such. A more specific aim will be to establish a context for focusing on American Cold War movies, as well as more recent films that look back to the Cold War era, and films that directly address the anti-psychiatry movement of the 1960s. **(H)** 

Instructor(s): W. J. T. Mitchell, J. Hoffman Terms Offered: Autumn

Prerequisite(s): Third- or fourth-year standing

Equivalent Course(s): BPRO 26400,ARTH 26905,ARTH 36905,ARTV 26411,ARTV

36411,CMST 25550,CMST 35550,ENGL 28703

#### ENGL 42301. Middlemarch. 100 Units.

This course will spend the entire quarter focusing on Eliot's masterwork, with some attention to the novel's literary and intellectual context. (B, G)

Instructor(s): L. Rothfield Terms Offered: Autumn

Prerequisite(s): Crosslisted courses are designed for advanced undergraduates and graduate students.

Equivalent Course(s): ENGL 24101, FNDL 22711

#### ENGL 44600. Introduction to Cultural Policy Studies. 100 Units.

The course is designed to move beyond the values debate of the culture wars in order to focus on how culturehere defined as the arts and humanitiescan be evaluated analytically as a sector, an object of policy research. In what sense can it be said that there is a national interest or public interest in culture? What is the rationale for government intervention in or provision for the arts and humanities? Is it possible to define the workings of culture in a way that would permit one to recommend one form of support rather than another, one mode of collaboration or regulation over another? Is it possible to measure the benefits (or costs)economic, social, and politicalof culture? We will begin by reading some classic definitions of culture and more recent general policy statements, then address a series of problematic issues that require a combination of theoretical reflection and empirical research.

Equivalent Course(s): PPHA 39600

#### ENGL 45403. American West. 100 Units.

This course considers the power of the west as an imagined construct, an ideologically charged and prophetic "direction" in American cultural production. Beginning with Elizabethan dreams of wealth and haven, as well as Revolutionary and Jeffersonian articulations of America's redemptive role in world politics, we will focus primarily on 19th novels and paintings of westwarding as an American "manifest destiny." Finally, we will turn to the marketing of the west in dime novels, the Wild West Show, Hollywood films, and contemporary television. Throughout the quarter we will follow out the challenges posed by recent scholars of the New Western History to boosters of the mythic west. **(B, F, G)** 

Instructor(s): J. Knight Terms Offered: Winter

Equivalent Course(s): ENGL 25403

#### ENGL 48000. Methods and Issues in Cinema Studies. 100 Units.

This course offers an introduction to ways of reading, writing on, and teaching film. The focus of discussion will range from methods of close analysis and basic concepts of film form, technique and style; through industrial/critical categories of genre and authorship (studios, stars, directors); through aspects of the cinema as a social institution, psycho-sexual apparatus and cultural practice; to the relationship between filmic texts and the historical horizon of production and reception. Films discussed will include works by Griffith, Lang, Hitchcock, Deren, Godard.

Instructor(s): Staff Terms Offered: Autumn

Equivalent Course(s): MAPH 33000, CMST 40000

#### ENGL 48700-48900. History of International Cinema I-II.

This sequence is required of students majoring in Cinema and Media Studies. Taking these courses in sequence is strongly recommended but not required.

#### ENGL 48700. History of International Cinema I: Silent Era. 100 Units.

This course introduces what was singular about the art and craft of silent film. Its general outline is chronological. We also discuss main national schools and international trends of filmmaking.

Instructor(s): J. Lastra Terms Offered: Autumn

Prerequisite(s): Prior or concurrent registration in CMST 10100 required.

Required of students majoring in Cinema and Media Studies.

Note(s): This is the first part of a two-quarter course.

Equivalent Course(s): CMST 28500,ARTH 28500,ARTH 38500,ARTV 26500,ARTV 36500,CMLT 22400,CMLT 32400,CMST 48500,ENGL 29300,MAPH 36000

# ENGL 48900. History of International Cinema II: Sound Era to 1960. 100 Units.

The center of this course is film style, from the classical scene breakdown to the introduction of deep focus, stylistic experimentation, and technical innovation (sound, wide screen, location shooting). The development of a film culture is also discussed. Texts include Thompson and Bordwell's *Film History: An Introduction*; and works by Bazin, Belton, Sitney, and Godard. Screenings include films by Hitchcock, Welles, Rossellini, Bresson, Ozu, Antonioni, and Renoir.

Instructor(s): T. Gunning Terms Offered: Winter

Prerequisite(s): Prior or concurrent registration in CMST 10100 required.

Required of students majoring in Cinema and Media Studies.

Note(s): CMST 28500/48500 strongly recommended

Equivalent Course(s): CMST 28600,ARTH 28600,ARTH 38600,ARTV 26600,CMLT 22500,CMLT 32500,CMST 48600,ENGL 29600,MAPH 33700

#### ENGL 48900. History of International Cinema II: Sound Era to 1960. 100 Units.

The center of this course is film style, from the classical scene breakdown to the introduction of deep focus, stylistic experimentation, and technical innovation (sound, wide screen, location shooting). The development of a film culture is also discussed. Texts include Thompson and Bordwell's *Film History: An Introduction*; and works by Bazin, Belton, Sitney, and Godard. Screenings include films by Hitchcock, Welles, Rossellini, Bresson, Ozu, Antonioni, and Renoir.

Instructor(s): T. Gunning Terms Offered: Winter

Prerequisite(s): Prior or concurrent registration in CMST 10100 required. Required of students majoring in Cinema and Media Studies.

Note(s): CMST 28500/48500 strongly recommended

Equivalent Course(s): CMST 28600,ARTH 28600,ARTH 38600,ARTV 26600,CMLT 22500,CMLT 32500,CMST 48600,ENGL 29600,MAPH 33700

#### ENGL 51300. Race, Media and Visual Culture. 100 Units.

For course description contact CDIN Center for Disciplinary Innovation. Equivalent Course(s): CDIN 51300,ARTH 49309,ARTV 55500,CMLT 51500,CMST 51300

#### ENGL 52401. The Policing of Culture. 100 Units.

We will discuss a) the historical rationales for governmental intervention in culture; b) the objects of policing action (producers, distributors, consumers, products, practices. etc.); c) the objectives of policing; d) the tools of governmental policing (negative tools such as regulation, prohibition/censorship, etc., but also positive tools such as incentives, allocation of property rights; information); and d) the political economy of cultural policy (how does one measure the impact of a governmental action on institutions, artists, audiences, or art works?). We will focus on three very different efforts at policing: the National Endowment for the Humanities' programs; attempts to develop cultural districts; and initiatives to stem the looting of archaeological sites.

Equivalent Course(s): PPHA 43300

#### ENGL 59304. Seminar: Catharsis and Other Aesthetic Responses. 100 Units.

Consent of instructor. Fulfills the core course requirement for CompLit students. Students who wish to take this course but have already taken a Comparative Literature core course may take this course with permission of the instructor. For other humanities PhDs: ACTIVE working knowledge of at least one of the following: French, German, (classical) Greek or Spanish. This PhD seminar examines the ramifications of catharsis and other responses to texts and images, in other words it investigates the relationship between effect and affect. Beginning with Aristotle and present day responses to catharsis, we will investigate the kinds of aesthetic response invoked by tragic drama and theory (esp Hegel), realism (Lukacs, Bazin and Brecht), as well as theories of pleasure (Barthes, Derrida), judgment (Kant, Bourdieu) and boredom (Spacks). We will conclude with a test case, exploring the potential and limitations of catharsis as an appropriate response to the literary and cinematic representation of trauma in and after the Argentine 'dirty war.' An essential part of the discussion will be the problem of translating key terms, not only from one language to another but also from one theoretical discourse and/or medium to another.

Instructor(s): Loren Kruger Terms Offered: Winter

Note(s): Comp Lit Ph.D. core course

Equivalent Course(s): CMST 50200, CMLT 50200

#### ENGL 68600. Classical Film Theory. 100 Units.

This course examines major texts in film theory from Vachel Lindsay and Hugo Münsterberg in the 1910s through André Bazin's writings in the 1940s and 1950s. We will devote special attention to the emergence of issues that continue to be of major importance, such as the film/language analogy, film semiotics, spectatorship, realism, montage, the modernism/mass culture debate, and the relationship between film history and film style. We will concentrate on the major theoretical writings of Münsterberg, Rudolf Arnheim, Jean Epstein, Sergei Eisenstein, Siegfried Kracauer, Bela Balazs, Bazin, as well as writings by Walter Benjamin, Germaine Dulac, Maya Deren, Jean Mitry, Vsevolod Pudovkin, and others.

Instructor(s): Jim Lastra Terms Offered: Winter

Equivalent Course(s): CMST 67200



# DEPARTMENT OF GERMANIC STUDIES

## Chair and Director of Undergraduate Studies

- David E. Wellbery
   Director of Graduate Studies
- Christopher J. Wild Professors
- · David J. Levin
- Eric L. Santner
- David E. Wellbery Associate Professors
- Christopher J. Wild Assistant Professors
- Margareta Ingrid Christian
- Florian Klinger
   Senior Lecturers
- Catherine Baumann
- Kimberly Kenny

Lecturers

- Sunny Yudkoff
   Emeritus Faculty
- · Reinhold Heller
- · Samuel Jaffe
- Kenneth J. Northcott
- Hildegund Ratcliffe

#### AFFILIATED FACULTY

- Philip V. Bohlman, Ph. D., Mary Werkman Professor of the Humanities and of Music; Chair of the Committee on Jewish Studies Interests: German-Jewish and German-American ethnomusicology; theory and history of folksong.
- John W. Boyer, Ph. D., Martin A. Ryerson Distinguished Service Professor of History; Dean of the College Interests: German and Austrian history, 18th century to the present; religion and politics in modern European history; European urban history.
- Daniel Brudney, Ph. D., Associate Professor of Philosophy Interests: Marx, German philosophy, Frankfurt School.
- James Conant, Ph. D., Professor of Philosophy Interests: Kierkegaard, Heidegger, Wittgenstein.

- Kathleen Conzen, Ph. D., Professor of History Interests: German-American history and the history of international migration.
- Constantin Fasolt, Ph. D., Karl J. Weintraub Professor of History; Master of the Social Sciences Collegiate Division; Deputy Dean of the Division of the Social Sciences; Associate Dean of the College Interests: Early modern German history.
- Michael Forster, Ph. D., Professor of Philosophy Interests: Herder, Hegel.
- Michael Geyer, Ph. D., Samuel N. Harper Professor of German and European History
  Interests: German history of the 19th and 20th centuries with special interest in contemporary German and European affairs.
- Andreas Glaeser, Ph. D., Associate Professor of Sociology
   Interests: Theories of culture and identity; with reference to Germany mostly
   post-unification controversies, social memory and architecture, reality
   construction processes among civil servants in authoritarian regimes.
- Gary Herrigel, Ph. D., Associate Professor of Political Science Interests: Political economy of advanced industrial states (Germany, USA, Japan), German political and industrial history in the 19th and 20th centuries, social and political theory.
- Berthold Hoeckner, Ph. D., Associate Professor of Music and the Humanities Interests:19th century Austro-German music; Lyrik und Lied; Romantische Musikästhetik; Wagner; Adorno and music.
- Loren Kruger, Ph. D., Professor, Department of English; Department of Comparative Literature; Committee on African Studies; Committee on Cinema and Media Studies; Committee on Theatre and Performance Studies Interests: German literature 18th century to present (esp. drama); GDR and contemporary Germany; Brecht, Heiner Müller, Marxism; the Cold War; Frankfurt School; "Das andere Deutschland."
- Jonathan Lear, Ph. D., John U. Nef Distinguished Service Professor at the Committee on Social Thought and in the Department of Philosophy Interests: Freud, Wittgenstein, Heidegger.
- Francoise Meltzer, Ph. D., Mabel Greene Meyers Professor of French, Comparative Literature, and the Divinity School; Acting Director of the Franke Institute for the Humanities Interests: German romanticism, philosophy.
- Paul Mendes-Flohr, Ph. D., Professor of Modern Jewish Thought in the Divinity School, Committee on Jewish Studies; Associate Faculty in the Department of History
  - Interests: German-Jewish intellectual history.
- Glenn W. Most, Ph. D., Visiting Professor in the Committee on Social Thought Interests: German literature and philosophy since the 18th century.
- Robert B. Pippin, Ph. D., Raymond W. and Martha Hilpert Gruner Distinguished Service Professor; Committee on Social Thought and Department of Philosophy

Interests: Kant; German Idealism; Nietzsche; Heidegger; Modernity Theory.

- Moishe Postone, Ph. D., Raymond W. and Martha Hilpert Gruner Distinguished Service Professor of History; Committee on Jewish Studies Interests: Marx, Frankfurt School, contemporary European social theory, contemporary German affairs (with particular focus on issues of anti-semitism and the relation of the Nazi past to postwar German society and culture).
- Robert Richards, Ph. D., Morris Fishbein Professor of the History of Science and Medicine; Professor in the Departments of Philosophy, History, Psychology, and the Committee on Conceptual and Historical Studies of Science Interests: German Romanticism, history and philosophy of science.
- Jerrold Sadock, Ph. D., Glen A. Lloyd Distinguished Service Professor, Department of Linguistics Interests: Germanic languages (Scandinavian, Yiddish).
- Malynne Sternstein, Ph. D., Associate Professor of Slavic Languages and Literatures
   Interests: Central European Studies, Literary, Psychoanalytic and Cultural
  - Theory; Art and Media Theory
- David Tracy, Ph. D., Andrew Thomas Greeley and Grace McNichols Greeley
  Distinguished Service Professor of Catholic Studies and Professor of Theology
  and the Philosophy of Religion in the Divinity School; Committee on Social
  Thought

Interests: 19th century German philosophy and theology.

#### **OVERVIEW**

The graduate program in Germanic Studies at the University of Chicago stresses an interdisciplinary model of study, long an emphasis at this University, which allows students to construct fields of research in fresh ways. In order to draw on the University's strengths, both inside and outside the department, students are encouraged to work not only with departmental and affiliated faculty but with faculty throughout the University whose courses are of relevance to their particular interests.

The University's Workshops (non-credit, interdepartmental seminars that meet biweekly) offer a further avenue for interdisciplinary work. Students are also encouraged to participate in the department's colloquia and lecture/discussions.

Language courses taught in the department include German, Norwegian, and Yiddish.

# Application and Financial Support

Applicants to the Department of Germanic Studies should have a solid background in German language and culture. Students with undergraduate degrees in other fields are encouraged to apply, but must include with their application a list of relevant German/Germanic courses as well as a letter of recommendation from a faculty member able to evaluate their level of German language competency. Such students will be asked to make up deficiencies in their language preparation before entry into the graduate program. All entering students whose native language is

not German are required to pass an ACTFL (American Council on the Teaching of Foreign Languages) oral proficiency examination in German during their first quarter in the program.

Admission to the department is competitive. Fellowships for a small number of highly qualified students combine stipend and teaching salary to provide support beyond tuition amounting to \$23,000 per year, up to four summer stipends in the amount of \$3,000 each, and University student health insurance. These awards are renewable for up to five years. The Department of Germanic Studies has some funds to support students in summer projects, travel, and research. In addition, the Norwegian Culture Program Endowment Fund provides some money for research and travel support for students interested in Norwegian language and culture. Finally, competitive fellowships are available for a final year of writing the dissertation.

Applications to the program must include a writing sample of not more than twenty pages, in German or English; Graduate Record Exam scores from the general examination; TOEFL (Test Of English as a Foreign Language) scores, if applicable; and three letters of recommendation.

The application process for admission and financial aid for all graduate students is administered through the divisional office of the Dean of Students (http://humanities.uchicago.edu/prospective). The Application for Admission and Financial Aid, with instructions, deadlines and department-specific information is available on the **Graduate Student Online Application page**. Please note that the application and all supporting materials are to be submitted online. Questions pertaining to admissions and aid should be directed to: humanitiesadmissions@uchicago.edu or (773) 702-1552.

# DEGREE REQUIREMENTS

The following is an outline of the main features of the graduate program. If you need additional information, please write directly to the Department of Germanic Studies (http://german.uchicago.edu/03\_contact/contact.html).

Students in the Department of Germanic Studies are as a rule admitted to the entire Ph.D. sequence of study. Students interested in a one-year interdisciplinary Master's program in Germanic Studies may want to contact the Master of Arts Program in the Humanities (http://humanities.uchicago.edu/depts/maph). Study towards the M.A. degree, normally completed after the first year, is intended as an introductory period, a time for both faculty and students to decide on the suitability of an extended graduate program. All students entering the Ph.D. program with a master's degree from another institution will undergo an informal evaluation at the end of their first year in the department to assess their progress and to plan their further course of study.

#### DEGREE OF MASTER OF ARTS

#### COURSE WORK

Three quarters of course work and a total of eight courses are required during the first year of study. These include the mandatory pedagogy course ("Acquisition and Teaching of Foreign Languages"). A completed M.A., which includes the pedagogy courses and a "superior" rating on the German oral proficiency test, are prerequisites for teaching appointments. Besides the pedagogy course, students must take at least one course each quarter from departmental faculty, and at least two additional courses from departmental faculty during the year. The remaining courses could contain little or no Germanic material and may be taken primarily for methodological, theoretical, or historical interest. Course selections must receive the approval of the Director of Graduate Studies (http://german.uchicago.edu/03\_contact/contact.html). All courses must be taken for a letter grade. We expect students to develop a broad historical sense of German culture through coursework as well as their own background reading. The primary aim of the master's year is for students to explore a variety of materials, approaches and problems.

#### Language Examination

Students who do not achieve a "superior" rating on the oral proficiency examination in German (to be taken early in their first quarter) will be advised to undertake further language training or to take other steps to improve their skills; they will be re-tested during the second quarter.

#### M.A. EXAM

The purpose of the M.A. exam is to test students' ability to work with concepts central to the discipline, to articulate literary-historical arguments, to discuss significant patterns that extend beyond individual texts, and to articulate how such concepts relate to the interpretation of individual works. In addition, the exam establishes a useful foundation of knowledge upon which the student can build in later studies.

The examination takes place in the eighth week of Spring Quarter of the student's first year of graduate study. Its basis is a list of some twenty to twenty-five texts selected by the student in consultation with the two members of the student's M.A. exam committee. (The committee – consisting of two members of the department's core faculty—is to be designated by the Director of Graduate Studies (http:// german.uchicago.edu/03\_contact/contact.html) in consultation with the student.) This list reflects a category of literary research such as a genre, a period, or a general concept bearing on a mode of writing. Examples of the former might be "The Bourgeois Tragedy" or "Modern Urban Short Prose" or "The Elegy." Periods can be variously conceived: Enlightenment, Realism, Weimar Republic. General concepts are more abstract categories such as "narrative" or "performance" or "argumentative writing." Lists could also be organized along thematic lines or in terms of a traditional narrative subject. The point is that the list be designed so as to sustain a process of coherent intellectual inquiry. In addition to the 20-25 primary texts, the list includes a representative cross-section of secondary literature addressing the topic under study.

The examination itself has two components:

- a) a take-home written examination, and
- b) an oral examination approximately one hour in length.

The take-home component consists of three essays (of two and one half, never more than three double-spaced pages) written in answer to questions devised by the faculty. These questions offer the student an opportunity to demonstrate her/his ability to explore various intellectual issues raised by the list as a whole as well as by specific works on the list. Students will receive these questions on Friday morning of the eighth week of classes and hand in their completed essays by 5:00 p.m. the following Monday. The oral examination is devoted to a critical discussion of the students' three essays as well as to works included on the list but not addressed in the written part of the examination. It will take place one week after the written exam. Following a forty-minute discussion of the essays, the student and the faculty examination committee will assess the student's overall progress, including course work.

A crucial aspect of the M.A. examination is planning and advising. Students should choose their examiners and have one planning meeting with each examiner by the eighth week of Autumn Quarter. Students should choose examiners and design the lists with a view to the seminars they plan to attend throughout the year. Students must submit their lists for approval at the end of the fourth week of Winter Quarter. Two weeks after submission, they should meet with their examiners to discuss preparation for the exams. During Spring Quarter, students should meet with their examiners twice prior to the exam in order to discuss questions arising from their readings. Of course, throughout the process students are encouraged to discuss questions arising from their readings with other faculty members, both inside and outside the Department of Germanic Studies.

#### First Year: Time Schedule for M.A. Exam

Fall, Week 8 - Choose examiners

Winter, Week 4 - Submit exam list for approval

Winter, Week 7 - Arrange to meet with examiners to discuss exam preparation

Spring, Week 8 - Written exam

Spring, Week 9 - Oral exam

# THE DEGREE OF DOCTOR OF PHILOSOPHY

The Ph.D. phase of study will be self-designed to a greater extent than the M.A. Students who enter with an M.A. from another university will be required to take one pedagogy course in their first year ("Acquisition and Teaching of Foreign Languages"). This requirement may be waived by the department if a student can demonstrate that equivalent work was successfully completed at another institution. Completion of the course (or a departmental waiver), together with a "superior" rating on the oral proficiency interview in German taken early in the first quarter (or re-taken later if necessary), are prerequisites for teaching appointments.

#### COURSE WORK

Students will establish that balance of course work and individual preparation that best suits their intellectual agenda. Course selections, however, must be approved by the Director of Graduate Studies (http://german.uchicago.edu/03\_contact/contact.html). A minimum number of eight courses over two years, not including the pedagogy course, is required. All of these

courses must be taken for credit. Six must be taken for a letter grade. The remaining two may be taken Pass/Fail. Typically, the two post-M.A. years (during which students will also be teaching) will look as follows: two seminars each quarter the first year; at least one seminar each quarter for the fall and winter quarters of the second year; exams in the spring quarter of the second year. In this way students will have ample time during the second Ph.D. year to prepare for the exams.

#### LANGUAGE EXAMINATION

All students are required to pass one university foreign language reading examination (usually in French, ancient Greek, Latin, Russian, Spanish, Turkish, or Italian) before taking their Ph.D. oral exams. Students whose dissertation work requires them to read original texts in a language not listed above may petition the department and division to accept that language instead.

#### PH.D. EXAMINATIONS

Students will complete the Ph.D. exams in three stages. During the last quarter of the first Ph.D. year and the following summer, students are asked to begin assembling a Ph.D. major field list (of about 50 works) and two annotated syllabi for future courses—one undergraduate, one graduate—that they would like to teach. An important part of the job market portfolio, the syllabi are to demonstrate the student's ability to 'translate' some of their research interests into viable seminars and to explain their choices. The syllabi should include a rationale for the design of the course. The two courses should be on topics other than the major field, although they may intersect with it. The major field list should be organized around a broad topic such as "Discourses of Madness from Kant to Musil", "Worldly Provincialism: German Realism 1850-1900", or "The Aesthetics of Sacrifice in Post-war German Literature and Art." Students should then group their 50 works into several clusters according to particular themes or sets of questions. Students are invited to consult with as many faculty members as possible as they work on these materials. They should also arrange for an exam committee of three faculty: two faculty members (normally both members of the department) to compose and evaluate the written examination questions, and a third faculty member (from either the departmental or affiliated faculty) to serve as an additional examiner for the oral exam.

At the beginning of the fall quarter of the second Ph.D. year, students will submit preliminary exam lists and both syllabi to the faculty committee they have chosen and to the graduate advisor. (In many cases, students will actually wish to submit one of these syllabi for the annual Tave competition in the winter quarter. (The Stuart Tave Teaching Fellowship allows graduate students to teach a free-standing, self-designed undergraduate class.)

The four-hour, open-book, written exam will be taken no later than the 7th week of spring quarter. Six weeks prior to the exam, each student will submit to the exam committee and to the graduate advisor a list of categories and questions that indicate what he or she considers to be the salient issues of the major field. Faculty will use this list as a guide in preparing the exam. Within two weeks of the exam, the committee, joined by the third member, will meet with the student for an hour-long discussion that will encompass the exam, the two syllabi, and plans for the dissertation. Students

should work on their dissertation proposals over the summer and schedule the formal proposal defense at the beginning of the fall quarter of the third Ph.D. year. For further details regarding the Ph.D. examinations, students are encouraged to consult with the graduate advisor.

#### Second Ph.D. Year: Time Schedule for Ph.D. Exam

Fall, Week 3 - Preliminary exam list and syllabi

Spring, Week 2 - Submit list of questions/categories designed to help you organize and think about the texts on your major field; these should be submitted to the exam committee and the DGS

Spring, Week 7 - Written exam

Spring, Week 9 - One hour long discussion of written exam, syllabi, major field list, and dissertation plans

#### DISSERTATION PROPOSAL

After the Ph.D. examination, a student should identify and select a dissertation committee. One member of the committee is chosen as the dissertation advisor and primary reader, and the others as second and third readers. A proposal ought not attempt to predict the final conclusions of the project before the research is fully under way. Instead, it should attempt to divide the project into subordinate questions and to rank the parts of the project in terms of priority. It should include a preliminary bibliography, a potential chapter structure and should indicate a rough timetable for the research and writing of the dissertation. The proposal of 20-25 pages should be problem-driven, question-oriented, and should contextualize the project within current debates in the field. The student will then have an opportunity to discuss the project in a PROPOSAL DEFENSE with the dissertation committee. This should be done not later than one quarter after the Ph.D. examination. Students should file copies of their examination lists and proposal with the department administrator.

The dissertation proposal is due no later than one quarter after passing Ph.D. examinations.

#### WRITING THE DISSERTATION

After the proposal has been approved by the readers, the student should plan on spending the remainder of the fourth year researching and reading. Some students may spend this time away; others may choose to remain in Chicago to work closely with their readers. We encourage students to try to complete the dissertation during the fifth year, if possible. All students should complete the dissertation by the end of the sixth year.

#### TEACHING IN THE COLLEGE

Graduate students in the Department of Germanic Studies at the University of Chicago will enter the job market with a solid basis in current pedagogical theory and practice as well as a range of teaching experiences in a variety of classroom settings. Teaching in the undergraduate language program is an integral part of the graduate program.

Before they begin teaching, graduate students must participate in a graduate seminar on pedagogy ("Acquisition and Teaching of Foreign Languages"). This course is an introduction to foreign language acquisition and to the theoretical models underlying current methods, approaches and classroom practices. Syllabus and test design and lesson planning are also treated. All participants do two days of observation and two days of supervised teaching in a first-year class.

Graduate students have the opportunity to teach in the beginning and intermediate German language program (http://german.uchicago.edu/12\_language/language.html). They have full responsibility for the courses they teach, including syllabus design, day-to-day instruction, test design, grading and all other record keeping. Input from the graduate students is also critical in the ongoing implementation and revision of the curriculum. Internal grant monies have been made available to support the development of an on-line writing project designed by graduate students, as well as other curricular innovations.

Graduate students also have the opportunity to work as on-site coordinators and/or instructors in study-abroad programs in Vienna and Freiburg (http://german.uchicago.edu/11\_studyabroad/studyabroad.html). The preparation of students for study-abroad and their reintegration into the curriculum is an ongoing process in which graduate students, in their roles as instructors, are deeply involved.

Each fall there is an orientation for all graduate students who will teach that year. It is held in conjunction with the Center for Teaching and Learning (http://teaching.uchicago.edu) and deals with general procedural and pedagogical issues as well as specific course objectives and practices. This inter-departmental cooperation also includes jointly held workshops and seminars on different topics in the field of second language teaching, offered by University of Chicago faculty and experts from other institutions.

#### COURSES

GRMN 33914. Absorption/Distanciation: Wagner, Brecht, Kluge. 100 Units. Explores Richard Wagner's music-dramas, Bertolt Brecht's plays, and Alexander Kluge's films as a forum for the formulation, circulation, and contestation of absorption and distanciation. While a conventional historical account would map the tensions between absorption and distanciation as a one-way trip, moving from absorption (in Wagner) to distanciation (as coined by Brecht) to distraction (as deployed by Kluge), we will explore how each artist deploys each term to varying effects. Works to be considered include Wagner's *The Flying Dutchman* and *Parsifal*, Brecht's *Man Is Man* and *The Measures Taken*, and Kluge's *Yesterday Girl* and *The Power of Emotions*. Readings by each artist, as well as by Theodor Adorno, Walter Benjamin, Michael Fried, Miriam Hansen, Andreas Huyssen, and Gertrud Koch. In English.

Instructor(s): D. Levin Terms Offered: Winter Equivalent Course(s): CMST 28304,CMST 38304,TAPS 28439,MUSI 29614,MUSI 33914,GRMN 29614

# GRMN 34714. Identity and Crisis: Readings in Narrative German Forms. 100 Units.

This course is concerned with close readings of texts which are marked by a deep preoccupation with the concept of crisis and the consequent efforts to achieve and maintain individual identity as a buttress against a world in flux—discursively, politically, philosophically, and ethically. The readings will revolve around the possibilities for being in the world as an engaged and self-contained narrative subject. We will work to develop a concept of 'crisis' as an organizational topos for 20th-century literature from Hugo von Hofmannsthal's *Chandos-Brief* (1902) to W.G. Sebald's *The Emigrants* (1992). The relationships between perspective and voice, exile and memory, language and knowledge, and genre and story construction will be of particular importance for textual analysis and may be supplemented by additional theoretical readings.

Instructor(s): A. Ellis Terms Offered: Winter

Equivalent Course(s): GRMN 24714

## GRMN 35614. Hölderlin and the Greeks. 100 Units.

The German poet Friedrich Hölderlin submitted to the paradoxical double-bind of Johann Joachim Winckelmann's injunction that "the only way for us [Germans] to become great or—if this is possible—inimitable, is to imitate the ancients." As he wrote in his short essay "The standpoint from which we should consider antiquity," Hölderlin feared being crushed by the originary brilliance of his Greek models (as the Greeks themselves had been), and yet foresaw that modern European self-formation must endure the ordeal of its encounter with the Greek Other. The faculty of the imagination was instrumental to the mediated self-formation of this Bildung project, for imagination alone was capable of making Greece a living, vitalizing presence on the page. Our seminar will therefore trace the work of poetic imagination in Hölderlin's texts: the spatiality and mediality of the written and printed page, and their relation to the temporal rhythms of spoken discourse. All texts will be read in English translation, but a reading knowledge of German and/or Greek would be desirable.

Instructor(s): C. Wild Terms Offered: Spring Equivalent Course(s): CLAS 45613, CMLT 35614

## GRMN 35713. Toward a Critique of Avarice. 100 Units.

With the help of Freud, Marx, Lacan, Foucault, Agamben (among others) along with some highpoints of the European literary canon, we propose to develop a "critique of avarice," a project to be sharply distinguished from the moralistic indignation at greed. Our historical and theoretical reflections on avarice open out on to a number of domains and modes of inquiry: from literary criticism to psychoanalysis, from the study of political economy to theories of biopolitics, and finally to the "Jewish question" in relation to all of this. The core text and touchstone of the seminar will be Shakespeare's *The Merchant of Venice*, in which the tensions, ambiguities, disavowals, hatreds, projections, and repressions associated with the "avarice complex" are magisterially staged and played out. Attention will also be given to the subsequent history of the figure of Shylock as well as to the capacities for mercy and forgiveness that were posited as the ideal opposites of avarice and usury. One of the goals of the seminar is to interrogate this very opposition.

Instructor(s): E. Santner, M. Dolar Terms Offered: Autumn

Equivalent Course(s): CDIN 35713, CMLT 35713

#### GRMN 36213. Materialism Old and New. 100 Units.

The course will take a close look at the historic emergence of materialism with ancient atomism in Democritus, Epicurus and Lucretius. We will then follow the re-emergence of atomism in the 17<sup>th</sup> and 18<sup>th</sup> centuries, with the advent of what is commonly labeled as mechanical materialism. Special attention will be given to Hegel's "account" of atomism with the introduction of the concepts of the one, the void, and negativity as the basis of the dialectical matrix. The further object of close scrutiny will be Marx's dissertation on the difference between the Democritean and Epicurean philosophy of nature. Finally, the contemporary readings of atomism would include Deleuze on Lucretius, Badiou on clinamen, Michel Serres, and particularly Lacan's take on Democritus, with the crucial notion of *den*. We will also consider the new and original work of Barbara Cassin, a figure little known in American academia.

Instructor(s): M. Dolar Terms Offered: Autumn

## GRMN 36913. Anagnorisis and the Cognitive Work of Theater. 100 Units.

In the *Poetics* Aristotle conceives anagnorisis or recognition as one of the three constitutive parts of the dramatic plot and defines it as the "a change from ignorance (agnoia) to knowledge (gnosis)." Implying the rediscovery of something previously known anagnorisis refers to the emplotment and staging of a certain kind of cognitive work characteristic of theater (as a locus of theoria or theory). For recognition is not only required of the dramatis personae on stage but also of the spectators who need to (re)-cognize a character whenever s/he enters. Just as the characters' anagnorisis isn't restricted to the filiation, i.e., identity, of other characters the audience's cognition concerns the understanding the plot as a whole. In short, by focusing on *anagnorisis* we can gain insight in the specific cognitive work of theater (and drama). Naturally we will begin in antiquity and examine the instantiation of recognition in Homer's Odyssey and several Greek tragedies as well as its first theorization in Aristotle's Poetics. Then we will jump to the modernes, specifically Enlightenment theater's obsession with anagnorisis and the cognitive work it performs, and investigate dramas by Diderot and Lessing. Kleist's dramatic deconstructions of German bourgeois and classical theater test the Enlightenment's claim to reason and reform of human cognition. Our last stop will be Brecht's theater of "Entfremdung" that makes the alienation at the heart of anagnorisis into the centerpiece of his aesthetic and political project. If we have time, we will also take a look at comical recognition as self-reflection of its tragic counterpart. Readings and discussions in English.

Instructor(s): C. Wild Terms Offered: Autumn

Equivalent Course(s): GRMN 26913,CLCV 25513,CLAS 35513,CMLT 26913,CMLT 36913,TAPS 28441

### GRMN 37813. Rilke, Sonnets to Orpheus. 100 Units.

This seminar will engage in close readings of Rilke's famous volume of poems. Supplementary readings will address some of the fundamental issues raised by the poems: the sonorous universe of poetry and the nature of the voice; the "Orphic" dimension of poetry; the religious and profane meanings of praise in relation to mourning. We will furthermore compare the treatment of the voice by Rilke with its treatment by another Prague writer: Franz Kafka. Excellent reading knowledge of German required.

Instructor(s): E. Santner Terms Offered: Autumn

Prerequisite(s): Reading knowledge of German required

Equivalent Course(s): FNDL 21706, GRMN 27813

#### GRMN 46114. German Classical-Romantic Aesthetics I. 100 Units.

This seminar will treat crucial texts in the so-called "classical" tradition of aesthetic theory in Germany. Authors treated will be Winckelmann, Herder, Goethe, Schiller. The seminar will center on the close reading of works by these authors, including essays on Greek sculpture by Winckelmann, Herder's essay on sculpture, selections from Kant's Critique of the Power of Judgment, Goethe's essays on the Laocoon statue, his introduction to the Propyläen, Schiller's Letters on Aesthetic Education, as well as selected works of secondary literature. Central topics: a) the concept of form; b) aesthetic experience and freedom; c) natural and artistic beauty; d) the paradigmatic status of Greek art; e) the autonomy of art. Texts will be available in English and German. Discussion in English.

Instructor(s): D. Wellbery Terms Offered: Winter Equivalent Course(s): CMLT 46114,SCTH 44912

#### GRMN 46214. German Classical-Romantic Aesthetics II. 100 Units.

This seminar will treat crucial texts in the "romantic" tradition of aesthetic theory in Germany. Authors treated will be Friedrich and August Wilhelm Schlegel, Novalis, Schelling, and Hegel. The centerpiece of the seminar will be the study of Schelling's Philosophy of Art. We will also examine portions of Hegel's Lectures on Aesthetics. Important contributions to the scholarship on romanticism (broadly conceived) will also be considered. Central topics will be: a) the historicity of art; b) the systematic unity of the arts; c) irony. Texts will be available in English and German. Discussion in English.

Instructor(s): D. Wellbery Terms Offered: Spring Equivalent Course(s): CMLT 46214,SCTH 44913

#### GERMANIC STUDIES - GERMAN COURSES

#### GRMN 32900. Beowulf. 100 Units.

This course will aim to help students read Beowulf while also acquainting them with some of the scholarly discussion that has accumulated around the poem. We will read the poem as edited in Klaeber's *Beowulf* (4th ed., Univ. of Toronto Press, 2008). Once students have defined their particular interests, we will choose which recent approaches to the poem to discuss in detail; we will, however, certainly view the poem both in itself and in relation to Anglo-Saxon history and culture in general. **(C, E)** 

Instructor(s): C. von Nolcken Terms Offered: Winter Prerequisite(s): PQ: ENGL 14900/35900 or the equivalent

Note(s): Cross listed courses are designed for advanced undergraduate and graduate students.

Equivalent Course(s): ENGL 15200, ENGL 35200, FNDL 28100

## GRMN 33300. German for Research Purposes. 100 Units.

This rigorous course begins with an introduction to grammar and vocabulary enabling students to read and comprehend German. Students then perform a series of process exercises designed to practice the specific skills they need to use German for research. Students able to work with texts and journals in their own discipline to complete these exercises. Graduate students who take and perform well in this course will be able to read in a foreign language reading, and will also master skills they useful as scholars in their field. The course also prepares student for the graduate reading exam. No previous knowledge of German necessary.

Terms Offered: Winter, Spring, Summer

Note(s): Graduate students only; undergraduates must have permission. Limit: 18.

**GRMN 33914. Absorption/Distanciation: Wagner, Brecht, Kluge. 100 Units.** Explores Richard Wagner's music-dramas, Bertolt Brecht's plays, and Alexander

Kluge's films as a forum for the formulation, circulation, and contestation of absorption and distanciation. While a conventional historical account would map the tensions between absorption and distanciation as a one-way trip, moving from absorption (in Wagner) to distanciation (as coined by Brecht) to distraction (as deployed by Kluge), we will explore how each artist deploys each term to varying effects. Works to be considered include Wagner's *The Flying Dutchman* and *Parsifal*, Brecht's *Man Is Man* and *The Measures Taken*, and Kluge's *Yesterday Girl* and *The Power of Emotions*. Readings by each artist, as well as by Theodor Adorno, Walter Benjamin, Michael Fried, Miriam Hansen, Andreas Huyssen, and Gertrud Koch. In English.

Instructor(s): D. Levin Terms Offered: Winter

Equivalent Course(s): CMST 28304,CMST 38304,TAPS 28439,MUSI 29614,MUSI 33914,GRMN 29614

# GRMN 34714. Identity and Crisis: Readings in Narrative German Forms. 100 Units.

This course is concerned with close readings of texts which are marked by a deep preoccupation with the concept of crisis and the consequent efforts to achieve and maintain individual identity as a buttress against a world in flux—discursively, politically, philosophically, and ethically. The readings will revolve around the possibilities for being in the world as an engaged and self-contained narrative subject. We will work to develop a concept of 'crisis' as an organizational topos for 20th-century literature from Hugo von Hofmannsthal's *Chandos-Brief* (1902) to W.G. Sebald's *The Emigrants* (1992). The relationships between perspective and voice, exile and memory, language and knowledge, and genre and story construction will be of particular importance for textual analysis and may be supplemented by additional theoretical readings.

Instructor(s): A. Ellis Terms Offered: Winter

Equivalent Course(s): GRMN 24714

# GRMN 34717. Identity and Crisis: Readings in Narrative German Forms. 100 Units.

,This course is concerned with close readings of texts which are marked by a deep preoccupation with the concept of crisis and the consequent efforts to achieve and maintain individual identity as a buttress against a world in flux – discursively, politically, philosophically and ethically. The readings will revolve around the possibilities for being in the world as an engaged and self-contained narrative subject. We will work to develop a concept of 'crisis' as an organizational topos for 20th-century literature from Hugo von Hofmannsthal's Chandos-Brief (1902) to W.G. Sebald's The Emigrants (1992). The relationships between perspective and voice, exile and memory, language and knowledge, and genre and story construction will be of particular importance for textual analysis and may be supplemented by additional theoretical readings.

Instructor(s): A. Ellis Terms Offered: Winter

## GRMN 34900. Old English. 100 Units.

This course is designed to prepare students for further study in Old English language and literature. As such, our focus will be the acquisition of those linguistic skills needed to encounter such Old English poems as *Beowulf, The Battle of Maldon*, and *The Wanderer* in their original language. In addition to these texts, we may also translate the prose *Life of Saint Edmund, King and Martyr* and such shorter poetic texts as the Exeter Book riddles. We will also survey Anglo-Saxon history and culture, taking into account the historical record, archeology, manuscript construction and illumination, and the growth of Anglo-Saxon studies as an academic discipline. This course serves as a prerequisite both for further Old English study at the University of Chicago and for participation in the Newberry Library's Winter Quarter Anglo-Saxon seminar. **(C, E)** 

Instructor(s): C. von Nolcken Terms Offered: Autumn Equivalent Course(s): ENGL 14900, ENGL 34900

### GRMN 35304. Goethe: Literature, Science, Philosophy. 100 Units.

This lecture-discussion course will examine Johann Wolfgang von Goethe's intellectual development, from the time he wrote *Sorrows of Young Werther* through the final states of *Faust*. Along the way, we will read a selection of Goethe's plays, poetry, and travel literature. We will also examine his scientific work, especially his theory of color and his morphological theories. On the philosophical side, we will discuss Goethe's coming to terms with Kant (especially the latter's third Critique) and his adoption of Schelling's transcendental idealism. The theme uniting the exploration of the various works of Goethe will be unity of the artistic and scientific understanding of nature, especially as he exemplified that unity in "the eternal feminine."

Instructor(s): R. Richards Terms Offered: Winter Note(s): German is not required, but helpful.

Equivalent Course(s): HIPS 26701, CHSS 31202, PHIL 20610, PHIL 30610, GRMN

25304,FNDL 23511,HIST 25304

#### GRMN 35614. Hölderlin and the Greeks. 100 Units.

The German poet Friedrich Hölderlin submitted to the paradoxical double-bind of Johann Joachim Winckelmann's injunction that "the only way for us [Germans] to become great or—if this is possible—inimitable, is to imitate the ancients." As he wrote in his short essay "The standpoint from which we should consider antiquity," Hölderlin feared being crushed by the originary brilliance of his Greek models (as the Greeks themselves had been), and yet foresaw that modern European self-formation must endure the ordeal of its encounter with the Greek Other. The faculty of the imagination was instrumental to the mediated self-formation of this Bildung project, for imagination alone was capable of making Greece a living, vitalizing presence on the page. Our seminar will therefore trace the work of poetic imagination in Hölderlin's texts: the spatiality and mediality of the written and printed page, and their relation to the temporal rhythms of spoken discourse. All texts will be read in English translation, but a reading knowledge of German and/or Greek would be desirable.

Instructor(s): C. Wild Terms Offered: Spring Equivalent Course(s): CLAS 45613, CMLT 35614

#### GRMN 35713. Toward a Critique of Avarice. 100 Units.

With the help of Freud, Marx, Lacan, Foucault, Agamben (among others) along with some highpoints of the European literary canon, we propose to develop a "critique of avarice," a project to be sharply distinguished from the moralistic indignation at greed. Our historical and theoretical reflections on avarice open out on to a number of domains and modes of inquiry: from literary criticism to psychoanalysis, from the study of political economy to theories of biopolitics, and finally to the "Jewish question" in relation to all of this. The core text and touchstone of the seminar will be Shakespeare's *The Merchant of Venice*, in which the tensions, ambiguities, disavowals, hatreds, projections, and repressions associated with the "avarice complex" are magisterially staged and played out. Attention will also be given to the subsequent history of the figure of Shylock as well as to the capacities for mercy and forgiveness that were posited as the ideal opposites of avarice and usury. One of the goals of the seminar is to interrogate this very opposition.

Instructor(s): E. Santner, M. Dolar Terms Offered: Autumn Equivalent Course(s): CDIN 35713,CMLT 35713

#### GRMN 36213. Materialism Old and New. 100 Units.

The course will take a close look at the historic emergence of materialism with ancient atomism in Democritus, Epicurus and Lucretius. We will then follow the re-emergence of atomism in the 17<sup>th</sup> and 18<sup>th</sup> centuries, with the advent of what is commonly labeled as mechanical materialism. Special attention will be given to Hegel's "account" of atomism with the introduction of the concepts of the one, the void, and negativity as the basis of the dialectical matrix. The further object of close scrutiny will be Marx's dissertation on the difference between the Democritean and Epicurean philosophy of nature. Finally, the contemporary readings of atomism would include Deleuze on Lucretius, Badiou on clinamen, Michel Serres, and particularly Lacan's take on Democritus, with the crucial notion of *den*. We will also consider the new and original work of Barbara Cassin, a figure little known in American academia.

Instructor(s): M. Dolar Terms Offered: Autumn

## GRMN 36913. Anagnorisis and the Cognitive Work of Theater. 100 Units.

In the Poetics Aristotle conceives anagnorisis or recognition as one of the three constitutive parts of the dramatic plot and defines it as the "a change from ignorance (agnoia) to knowledge (gnosis)." Implying the rediscovery of something previously known anagnorisis refers to the emplotment and staging of a certain kind of cognitive work characteristic of theater (as a locus of theoria or theory). For recognition is not only required of the dramatis personae on stage but also of the spectators who need to (re)-cognize a character whenever s/he enters. Just as the characters' anagnorisis isn't restricted to the filiation, i.e., identity, of other characters the audience's cognition concerns the understanding the plot as a whole. In short, by focusing on *anagnorisis* we can gain insight in the specific cognitive work of theater (and drama). Naturally we will begin in antiquity and examine the instantiation of recognition in Homer's Odyssey and several Greek tragedies as well as its first theorization in Aristotle's *Poetics*. Then we will jump to the *modernes*, specifically Enlightenment theater's obsession with anagnorisis and the cognitive work it performs, and investigate dramas by Diderot and Lessing. Kleist's dramatic deconstructions of German bourgeois and classical theater test the Enlightenment's claim to reason and reform of human cognition. Our last stop will be Brecht's theater of "Entfremdung" that makes the alienation at the heart of anagnorisis into the centerpiece of his aesthetic and political project. If we have time, we will also take a look at comical recognition as self-reflection of its tragic counterpart. Readings and discussions in English.

Instructor(s): C. Wild Terms Offered: Autumn

Equivalent Course(s): GRMN 26913,CLCV 25513,CLAS 35513,CMLT 26913,CMLT 36913,TAPS 28441

#### GRMN 37813. Rilke, Sonnets to Orpheus. 100 Units.

This seminar will engage in close readings of Rilke's famous volume of poems. Supplementary readings will address some of the fundamental issues raised by the poems: the sonorous universe of poetry and the nature of the voice; the "Orphic" dimension of poetry; the religious and profane meanings of praise in relation to mourning. We will furthermore compare the treatment of the voice by Rilke with its treatment by another Prague writer: Franz Kafka. Excellent reading knowledge of German required.

Instructor(s): E. Santner Terms Offered: Autumn

Prerequisite(s): Reading knowledge of German required

Equivalent Course(s): FNDL 21706, GRMN 27813

#### GRMN 39113. Brecht and the (Theatrical) Praxes of Theory. 100 Units.

Exploration of Brecht's theoretical texts and theater works—with a special focus upon his Messingkauf Dialogues—in order to map out their implications for theater practice. This seminar is part of a collaborative inter-institutional project (between the University of Chicago, Tel Aviv University, and Frankfurt University) to re-think the Messingkauf Dialogues. We expect to present the results of our work on each collaborating institution's campus in the course of the summer/fall of 2013 (pending funding approval). Open by permission only, to advanced undergraduates and beginning graduate students. Students interested in participating should contact the professor in the course of the Autumn Quarter.

Instructor(s): D. Levin Terms Offered: Winter

Note(s): Consent of Instructor required during Autumn Quarter.

Equivalent Course(s): GRMN 29113, TAPS 28436

#### GRMN 39313. BRECHT & THE (THEATRICAL) PRAXES OF THEORY. 100 Units.

Exploration of Brecht's theoretical texts and theater works—with a special focus upon his Messingkauf Dialogues—in order to map out their implications for theater practice. This seminar is part of a collaborative inter-institutional project (between the U of Chicago, Tel Aviv Univ, and Frankfurt Univ) to re-think the Messingkauf Dialogues. We expect to present the results of our work on each collaborating institution's campus in the course of the summer/fall of 2013 (pending funding approval). Open by permission only, to advanced undergraduates and beginning graduate students. Students interested in participating should contact the professor in the course of the Autumn quarter.

Prerequisite(s): Winter

Equivalent Course(s): GRMN 29313

#### GRMN 46114. German Classical-Romantic Aesthetics I. 100 Units.

This seminar will treat crucial texts in the so-called "classical" tradition of aesthetic theory in Germany. Authors treated will be Winckelmann, Herder, Goethe, Schiller. The seminar will center on the close reading of works by these authors, including essays on Greek sculpture by Winckelmann, Herder's essay on sculpture, selections from Kant's Critique of the Power of Judgment, Goethe's essays on the Laocoon statue, his introduction to the Propyläen, Schiller's Letters on Aesthetic Education, as well as selected works of secondary literature. Central topics: a) the concept of form; b) aesthetic experience and freedom; c) natural and artistic beauty; d) the paradigmatic status of Greek art; e) the autonomy of art. Texts will be available in English and German. Discussion in English.

Instructor(s): D. Wellbery Terms Offered: Winter Equivalent Course(s): CMLT 46114,SCTH 44912

#### GRMN 46214. German Classical-Romantic Aesthetics II. 100 Units.

This seminar will treat crucial texts in the "romantic" tradition of aesthetic theory in Germany. Authors treated will be Friedrich and August Wilhelm Schlegel, Novalis, Schelling, and Hegel. The centerpiece of the seminar will be the study of Schelling's Philosophy of Art. We will also examine portions of Hegel's Lectures on Aesthetics. Important contributions to the scholarship on romanticism (broadly conceived) will also be considered. Central topics will be: a) the historicity of art; b) the systematic unity of the arts; c) irony. Texts will be available in English and German. Discussion in English.

Instructor(s): D. Wellbery Terms Offered: Spring Equivalent Course(s): CMLT 46214,SCTH 44913

GRMN 51400. Arabesque Narrative: A Hybrid Form of the Imaginary. 100 Units.

For course description contact CDIN Center for Disciplinary Innovation.

Equivalent Course(s): CDIN 51400, ARTH 46210, SCTH 51400

GERMANIC STUDIES - NORWEGIAN COURSES



# DEPARTMENT OF LINGUISTICS

#### Chair

• Chris Kennedy

#### Professors

- Diane Brentari
- Victor Friedman, Slavic Languages & Literatures
- Susan Gal, Anthropology
- Anastasia Giannakidou
- · John Goldsmith
- Lenore Grenoble, Slavic Languages & Literatures
- · Chris Kennedy
- · Jason Merchant
- Salikoko Mufwene
- Michael Silverstein, Anthropology Associate Professors
- · Karlos Arregi
- · Amy Dahlstrom
- Jason Riggle
- Alan Yu

**Assistant Professors** 

- Itamar Francez
- Greg Kobele
- Ming Xiang

**Emeritus Faculty** 

- Howard I. Aronson, Slavic Languages & Literatures
- Bill Darden, Slavic Languages & Literatures
- Gene B. Gragg, Oriental Institute
- · Paul Friedrich, Anthropology
- Eric P. Hamp, Linguistics
- Carolyn G. Killean, Near Eastern Languages & Civilizations
- Colin P. Masica, South Asian Languages & Civilizations
- G. David McNeill, Psychology
- Jerrold Sadock, Linguistics

Since 1926, the Department of Linguistics at the University of Chicago has been at the center of the development of the field, counting among its faculty linguists of the first rank such as Sapir and Bloomfield. It is theory-oriented with a deep empirical interest in languages. One of its outstanding characteristics is its commitment to a wide range of approaches to the study of language. Interdisciplinary, interdepartmental study is encouraged, and students regularly

work with faculty in several other departments. Students are expected to become active researchers as soon as possible after their arrival here. Many students come with strong undergraduate training in linguistics, or with a Master's degree; others come with strong training in fields such as philosophy, mathematics, or a particular language or language group. The faculty are involved in synchronic and diachronic research on languages from around the world. These varied interests are reflected in the topics of the dissertations that have been written in the Department.

## PROGRAM

The University of Chicago operates on the quarter system. The graduate program in linguistics leading to the PhD degree is intended to be completed in five years. Graduate students normally register for three courses per quarter, three quarters per year. They generally take three to four years of coursework. In the first year, students take nine courses, three of their choosing as well as the following six obligatory courses: LING 30101 Phonological Analysis I, LING 30102 Phonological Analysis II, LING 30201 Syntactic Analysis I, LING 30202 Syntactic Analysis II, LING 30301 Semantics and Pragmatics I, and LING 30302 Semantics and Pragmatics II; they must also enroll in the colloquium series course (P/F). In subsequent years, students have a great deal of flexibility in course selection, though their programs of study must include the following: one course each in historical linguistics and morphology; a "methods" course (field methods, mathematical methods, etc.); and one advanced course in each of the following areas:

- Phonetics/phonology
- Syntax/semantics/pragmatics
- Socio-historical linguistics

In years two and three, when students are writing qualifying papers, they must also take the Research Seminar.

A large proportion of courses offered in the Linguistics Department are advanced courses that are open to all students. The topics of these courses change from year to year, in reflection of the ongoing research interests of both faculty and graduate students, and cover areas of current interest in the field at large. Students are also free to take courses related to their research interests that are offered by other departments in the University.

In the second and third years, students continue taking courses and write two qualifying papers under faculty supervision. In addition to these major landmarks, students are required to pass reading examinations in two scholarly languages (normally French, German, Spanish, Chinese, Japanese, or Russian, though others may be substituted upon petition to the department), and to satisfy a non-Indo European language requirement. Upon completion of the qualifying papers and language requirements and defense of a dissertation proposal, students are admitted to candidacy for the PhD; the only remaining requirement is the dissertation.

The University of Chicago offers several joint doctoral programs. Such options currently exist between the Department of Linguistics and the Department of Anthropology, the Department of Comparative Human Development, the

Department of Psychology, the Department of Near Eastern Languages and Civilizations, the Department of Slavic Languages and Literatures, and the Department of Philosophy. Students from other departments who wish to apply for a joint PhD in Linguistics may do so only after completing the six foundational courses (Phonological Analysis 1, 2; Syntactic Analysis 1, 2; and Semantics and Pragmatics 1, 2).

## Application and Admission

Completed applications for admission and aid, along with all supporting materials, are due in mid-December for the academic year that starts in the following Autumn.

Four parts of the application are critically important and should accompany the application: the student's academic record, letters of recommendation submitted by persons able to describe the student's achievements and promise, the student's statement of purpose, which describes the intellectual issues and subjects which they hope to explore at Chicago, and a sample of pertinent written work that demonstrates the applicant's research interests or capabilities. The sample may consist of published essays, class term papers, or a B.A. or M.A. thesis, or some combination of all of these. The student's academic record is documented through official transcripts, but applicants are also encouraged to submit as supplemental material an 'annotated transcript': a file they create that lists all the courses they have taken which are relevant to graduate study in linguistics, with the grade received, the full name of the instructor, major texts used or studied, and a brief (no more than five sentences) description of the material covered in the course. Such a supplemental file is more informative for judging the preparation of an applicant than is the official transcript.

Students whose first language is not English must submit scores from the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS). Information about these tests may be obtained from the Educational Testing Service, Princeton, NJ 08540.

When completing the application form, it is of benefit to the applicant to be as specific as possible in describing his or her research interests. General comments are of relatively little use; applicants are encouraged to discuss specific linguistic subject matters that they are interested in or have worked on.

If an applicant knows faculty members with whom he or she might work, the latter's names should be given as well. The faculty of the Linguistics Department would be happy to answer any questions that prospective students may have. Please contact them individually regarding their research or classes, or contact the Director of Graduate Studies for more general or administrative questions.

The application process for admission and financial aid for all graduate programs in Humanities is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online at: http://humanities.uchicago.edu/prospective/admissions.html.

Questions pertaining to admissions and aid should be directed to humanitiesadmissions@uchicago.edu or (773) 702-1552.

#### LINGUISTICS - LINGUISTICS COURSES

## LING 30101. Phonological Analysis I. 100 Units.

This course introduces cross-linguistic phonological phenomena and methods of analysis through an indepth examination of fundamental notions that transcend differences between theoretical approaches: contrast, neutralization, natural classes, distinctive features, and basic non-linear phonological processes (e.g., assimilation, harmony, dissimilation).

Instructor(s): Alan Yu Terms Offered: Autumn

## LING 30102. Phonological Analysis II. 100 Units.

This course is a continuation of Phonological Analysis I focusing on topics of current interest in phonological theory. Topics vary.

Instructor(s): Diane Brentari Terms Offered: Winter

Prerequisite(s): LING 30101

#### LING 30201. Syntactic Analysis I. 100 Units.

This course is an introduction to basic goals and methods of current syntactic theory through a detailed analysis of a range of phenomena, with emphasis on argumentation and empirical justification. Major topics include phrase structure and constituency, selection and subcategorization, argument structure, case, voice, expletives, and raising and control structures.

Instructor(s): Karlos Arregi Terms Offered: Autumn

## LING 30202. Syntactic Analysis II. 100 Units.

This course is a continuation of Syntactic Analysis I. It expands our examination of the locality of various syntactic dependencies, especially the nature of unbounded dependencies in a wide variety of languages. Topics include A'-movement and nonmovement in interrogatives, relatives, and comparatives, partial wh-movement, wh-expletives, resumptivity, islands (selective and strong), reconstruction effects, intervention effects, and the nature of successive cyclic movement. The course will have a strong cross-linguistic aspect to it, examining data from Korean, Irish, Hungarian, Turkish, Tzotzil, Swahili, Chinese, Japanese, Greek, Slavic, Romance, and Germanic languages, Chamorro and other Austronesian languages, and varieties of Arabic, among others.

Instructor(s): Greg Kobele Terms Offered: Winter

Prerequisite(s): LING 30201

## LING 30301. Semantics and Pragmatics I. 100 Units.

This is the first in a two-course sequence designed to provide a foundation in the scientific study of all aspects of linguistic meaning. The first quarter focuses primarily on pragmatics: those aspects of meaning that arise from the way that speakers put language to use, rather than through the formal properties of the linguistic system itself, which is the domain of semantics. However, a central goal of the course will be to begin to develop an understanding of the relation between pragmatics and semantics, by exploring empirical phenomena in which contextual and conventional aspects of meaning interact in complex but regular and well-defined ways, and by learning analytical techniques that allow us to tease these two aspects of linguistics meaning apart.

Instructor(s): Anastasia Giannnakidou Terms Offered: Autumn

## LING 30302. Semantics and Pragmatics II. 100 Units.

This is the second in a two-course sequence designed to provide a foundation in the scientific study of all aspects of linguistic meaning. The second quarter focuses on the syntax-semantics interface and cross-linguistic semantics. The class will introduce in detail a theory of the way in which the meaning of complex linguistic expressions is formed compositionally from the meaning of constituent parts, and the interaction of semantic and syntactic composition. This theory will form the basis for exploring some empirical questions about the systematicity of cross-linguistic variation in the encoding of meaning.

Instructor(s): Itamar Francez Terms Offered: Winter

Prerequisite(s): LING 30301

#### LING 30750. Cross-linguistic Semantics. 100 Units.

Please visit the Linguistics website for a course description.

Instructor(s): Itamar Francez Terms Offered: Spring

#### LING 30770. Deixis. 100 Units.

Please visit the Linguistics website for a course description.

Instructor(s): Kjell Saebo Terms Offered: Autumn

## LING 31000. Morphology. 100 Units.

Looking at data from a wide range of languages, we will study the structure of words. We will consider the nature of the elements out of which words are built and the principles that govern their combination. The effects of word structure on syntax, semantics, and phonology will be examined. We will think critically about the concepts of morpheme, inflection, derivation, and indeed, the concept of word itself.

Instructor(s): Amy Dahlstrom Terms Offered: Spring

Prerequisite(s): LING 20001, ANTH 37500

Equivalent Course(s): LING 21000

#### LING 31010. Mathematical Foundations. 100 Units.

This course is an introduction to formal tools and techniques which can be used to better understand linguistic phenomena. A major goal of this course is to enable students to formalize and evaluate theoretical claims.

Instructor(s): Greg Kobele Terms Offered: Autumn

## LING 31100. Language in Culture I. 100 Units.

Among topics discussed in the first half of the sequence are the formal structure of semiotic systems, the ethnographically crucial incorporation of linguistic forms into cultural systems, and the methods for empirical investigation of "functional" semiotic structure and history.

Instructor(s): M. Silverstein Terms Offered: Autumn

Prerequisite(s): Consent of instructor

Equivalent Course(s): ANTH 37201, CHDV 37201, PSYC 47001

#### LING 31200. Language in Culture II. 100 Units.

The second half of the sequence takes up basic concepts in sociolinguistics and their critique.

Instructor(s): C. Nakassis Terms Offered: Winter

Prerequisite(s): Consent of instructor

Equivalent Course(s): ANTH 37202, PSYC 47002

## LING 31300. Historical Linguistics. 100 Units.

This course deals with the issue of variation and change in language. Topics include types, rates, and explanations of change; the differentiation of dialects and languages over time; determination and classification of historical relationships among languages, and reconstruction of ancestral stages.

Instructor(s): Rebecca Hasselbach Terms Offered: Spring

## LING 35120. Syntactic Variation. 100 Units.

Please visit the Linguistics website for a course description.

Instructor(s): Staff Terms Offered: Spring

## LING 35160. Themes in the Development of 20th Century Linguistics. 100 Units.

This course will be based on Goldsmith and Laks (2014): "Battle in the Mind Fields."

The subject is the development of linguistics in the 20<sup>th</sup> century, and the parallel evolution of ideas in psychology and philosophy. Topics will include: Bloomfield and Sapir; Harris and Hockett; Chomsky and the rise of generative grammar; Carnap and how Chomsky 1955 was intended to integrate linguistics into Carnap's scientific worldview; behaviorism and neo-behaviorism (Watson, Hull, Tolman), and the rise of cognitive psychology (George Miller, Ulric Neisser. See http://hum.uchicago.edu/jagoldsm/battle/battle-toc.pdf for more detail.

Instructor(s): John Goldsmith Terms Offered: Autumn

Equivalent Course(s): LING 25160

## LING 37900. Structure of American Sign Language. 100 Units.

Please visit the Linguistics website for a course description.

Instructor(s): Diane Brentari Terms Offered: Autumn

## LING 37910. Sign Language Linguistics. 100 Units.

This course, intended for upper level undergraduates and graduate students, will cover a wide range of analyses of different sign languages, and from a variety of theoretical and methodological perspectives. The focus will be on how sign language linguistics has contributed to broadening general approaches to the study of language and to linguistic theory as a whole. Questions to be addressed include: "What impact does communication modality have on grammar?", "What is the relationship between sign language and gesture?", "How does the cross-linguistic study of sign languages help us understand the emergence of language?", and "How do phenomena in sign languages broaden our understanding of what is universal in language?" Previous knowledge of sign language is not assumed. Instructor(s): Diane Brentari Terms Offered: Winter

Prerequisite(s): LING 20101/30101 and LING 20201/30201 or permission of instructor Equivalent Course(s): LING 27910

## LING 38600. Computational Linguistics. 100 Units.

This course introduces the problems of computational linguistics and the techniques used to deal with them, focusing primarily on probabilistic models and techniques. Topics are drawn primarily from phonology, morphology, and syntax. Special topics include automatic learning of grammatical structure and the treatment of languages other than English.

Instructor(s): J. Goldsmith Terms Offered: Winter

Prerequisite(s): CMSC 12200, 15200 or 16200, or competence in a programming language

Equivalent Course(s): CMSC 25020, CMSC 35050, LING 28600

## LING 39601. East Asian Languages, Acquisition and Pedagogy. 100 Units.

This course will address significant issues in teaching and learning an East Asian language through identification and analysis of specific sociolinguisitic and linguistic characteristics of Korean, Japanese, and Chinese. The course will begin with the introduction of linguistic structures of the three East Asian languages to begin discussing the interaction between language acquisition and society. Then, we will explore sociolinguistic issues common to the three languages that underlie the linguistic diversity (and similarities) of East Asia, such as the following topic: (i) the use of Chinese characters, the history of writing reform, and its relation to literacy in East Asian languages; (ii) loan words in East Asian languages, in particular, the use of Chinese characters in modern Japanese and Korean in age of colonialism; (iii) the development and use of honorifics in China, Japan, and Korea, etc. For a comparative approach and perspective to these topics, students will read academic papers for each language on a given topic and discuss the unique sociolinguistic features of each language. Such an approach will allow us to analyze the language influence and interaction among the three languages and how that shapes the culture, society, and language acquisition. Finally, this course will also introduce the field of second language acquisition focusing on how social factors influence L2 learning and acquisition.

Instructor(s): H. Kim Terms Offered: Winter

Equivalent Course(s): EALC 36601, LING 29601, EALC 26601

#### LING 40310. Experimental Methods. 100 Units.

This course will provide training on experimental design, data collection and analysis. We will go through a range of experimental paradigms, and students will acquire hands on experience through a course project. This class will set the ground for students to explore more advanced experimental methods in the future. Instructor(s): Ming Xiang Terms Offered: Spring

#### LING 42100. Seminar: Semantics. 100 Units.

Please visit the Linguistics website for a course description.

Instructor(s): Kjell Saebo, Autumn; Anastasia Giannakidou, Spring Terms Offered: Autumn, Spring

Note(s): This course has a different topic each quarter it is offered.

#### LING 43000. Bilingualism. 100 Units.

Bilingualism (or multilingualism more generally), as a phenomenon, is a pervasive reality - with more than 6000 languages spoken, and at most 200 countries in the world today, more than half of the world's population is (at least) bilingual today. Popular approaches to bilingualism, however—and indeed those that often dictate education policy and curriculum—have long been dominated by views that treat bilingualism as a disadvantage; and these are in tension with recent scientific developments in linguistics and cognitive psychology showing that bilingualism brings cognitive advantages that relate to general intelligence, metalinguistic awareness (i.e. the ability to bring into explicit consciousness linguistic form and structure in order to produce the underlying meaning of utterances), and cultural flexibility. In this seminar, we will study bilingualism with the intent to dispel the myths about it, and to bridge the gaps in the disciplines that study it, by raising the central question of how languages co-exist in the brain, in conversation, and in culture. How is bilingualism perceived in creative processes, in films, song lyrics and literary texts? And what is the impact of bilingualism in the self-perception of individuals and social groups? Studying bilingualism, we speculate, has broad implications for our understanding of language, cognition, literature and culture, and has the potential to (at least partly) redefine the disciplines that study it. Instructor(s): Anastasia Giannakidou Terms Offered: Spring

#### LING 45200. Languages of the Americas. 100 Units.

This course is open to students interested in learning more about the indigenous languages of North, Central, and South America, those planning to begin work on one of the American languages, and those already engaged in research on American languages who would like to have a venue to get feedback on their current project(s).

Instructor(s): Amy Dahlstrom Terms Offered: Spring

#### LING 46000. Seminar: Syntax. 100 Units.

Topic: Head Finality

This seminar examines crosslinguistic variation in word order at the sentence level (e.g. O-V vs. V-O, V-Aux vs. Aux-V), concentrating on issues that arise in the study of head-final constructions. We will look both at languages that exhibit consistent head-final syntax (e.g. Japanese, Korean) and those in which head-finilaity is restricted to some constructions (e.g. German, Basque). Different Minimalist perspectives on these issues will be discussed, including approaches that adopt a universal head-complement order, as well as those that do not.

Instructor(s): Karlos Arregi Terms Offered: Autumn

Prerequisite(s): Graduate student in Linguistics of consent of instructor Note(s): This course has a different topic each quarter it is offered.

## LING 47900. Research Seminar. 100 Units.

The course aims to guide students on their research in a structured way and to present professionalization information crucial to success in the field. The course is organized largely around working on the research paper, with the goal of making it a conference-presentable and journal-publishable work. Topics covered include abstracts, publishing, handouts, presentation skills, course design, creating and maintaining a CV, cover letters, webpages, and in general everything that is required for you to successfully compete for jobs in linguistics.

Instructor(s): Itamar Francez and Alan Yu Terms Offered: Winter

#### LING 50510. Seminar: Psycholinguistics. 100 Units.

Topic: Experimental Approaches to Semantics and Pragmatics

How do we compute semantic and pragmatic meaning in sentence and discourse processing? How does our knowledge of the world enter into our computation? How should we approach the mapping hypothesis between abstract linguistic representations and observable language behavior? This course will address these theoretical issues from an experimental point of view. To familiarize students with the major debates and arguments on these issues, we will also introduce different experimental methods that have been used in the field.#

Instructor(s): Ming Xiang Terms Offered: Spring

Note(s): This course has a different topic each quarter it is offered.

## LING 52400. Seminar: Phonology. 100 Units.

Topic: Coarticulation

The notion of "coarticulation" might seem easier to grasp enough at first glance, but when you dig deeper, you'll find that researchers have widely differing opinions on what it really is. The most pressing questions include, (i) is coarticulation planned or simply a consequence of articulatory inertia? Put it differently, is coarticulation part of phonology? (ii) are there functional motivations for coarticulation? That is, do speakers coarticulate in order to help the listener's comprehension? (iii) how do listeners deal with coarticulated speech? (iv) how is coarticulation related to language variation and change at the phonetic and phonological levels? To examine these issues closely, we will investigate a particular type of coarticulation together as a class project (i.e. we will design and implement an experiment together). Students taking the class for credit will also have to pick (in consultation with the instructor) a type of coarticulatory pattern to investigate on their own and to report to class their findings.

Instructor(s): Alan Yu Terms Offered: Winter

Prerequisite(s): LING 30102 or instructor's consent

Note(s): This course has a different topic each quarter it is offered.

# LING 53300. Philosophy of Language Seminar: Quotations, Pictures, Words. 100 Units.

his seminar will examine one of the primary devices by means of which we talk about language ad mental content. Topics will include the varieties of quotation: direct, indirect, mixed, pure, and non-literal (scare-quotes); various current theories of direct and indirect quotation; the relation between quotation and meaning; context-sensitivity and quotation; and the pictorial character of quotation. More generally, the seminar will investigate quotation as a phenomenon on the border between semantics and pragmatics and between linguistic and non-linguistic modes of representation. Readings will be drawn from authors such as Frege, Quine, Tarski, Davidson, Bennett, Cappelen and Lepore, H. Clark, Recanti, Garcia-Carpintero, Geurts, C. Potts, Kaplan, T. Parsons, Predelli, Burge Peacocke, Brandom, Reimer, Richard, Saka, Sperber and Wilson, and Washington. (II)

Instructor(s): J. Stern Terms Offered: Winter Equivalent Course(s): DVPR 53302,PHIL 53300



# DEPARTMENT OF MUSIC

#### Chair

- Robert Kendrick Professors
- Philip V. Bohlman
- Thomas Christensen
- Martha Feldman
- · Robert L. Kendrick
- · Marta Ptaszynska
- Shulamit Ran
- Anne Walters Robertson
- Augusta Read Thomas Associate Professors
- · Berthold Hoeckner
- Travis A. Jackson
- · Steven Rings
- Lawrence Zbikowski Assistant Professors
- Seth Brodsky
- Melvin Butler
- Anthony Cheung
- Kaley Mason
   Senior Lecturers
- Howard Sandroff
- Barbara Schubert

#### Lecturers

- · Amy Briggs
- James Kallembach
- Philip Kloeckner Emeritus Faculty
- Easley R. Blackwood
- John Eaton
- Philip Gossett
- Don Randel

## PROGRAMS OF STUDY

The Department of Music at the University of Chicago offers the degree of Doctor of Philosophy in three areas: composition, ethnomusicology and the history and theory of music.

The program in composition is designed to develop students' creative and technical abilities at writing new music. Students take individual composition lessons with faculty members, often studying with more than one faculty member in the course of their residence. Students also receive training in a wide variety of related areas and skills, including score reading and conducting, orchestration, musical analysis, twentieth century styles, historical periods and (optionally) computer generated sound synthesis. A portion of this training will lead to the development of a minor field in ethnomusicology, musicology, theory and analysis or research in computer music. There is a weekly seminar for all of the students in the composition program, designed to broaden the perspectives and address the problems of aspiring composers.

The program in ethnomusicology prepares students to carry out scholarship and writing about the place of music in various cultures. Students receive grounding in cultural theory, anthropology, ethnographic methods, problems in cross-cultural musical analysis, and a variety of world and popular musics. They also conduct fieldwork on some of these musics. The program is interdisciplinary, drawing upon course offerings in music, anthropology and a variety of area studies.

The program in music history and theory prepares students to carry out various kinds of scholarship and writing about music, especially (but not solely) in traditions of European and American repertories. Students may emphasize either the historical or theoretical side of scholarship, according to their interests, and may also choose to pursue a minor field in composition. Students emphasizing music history typically concentrate on varieties of musicology that include cultural history, textual criticism, stylistic studies, institutional history, hermeneutics and critical theory. Students emphasizing music theory typically concentrate on detailed analysis of individual works, clusters of works (by genre or composer, for example), theoretical systems and the history of theory. Most students who complete the Ph.D. in music history and theory seek academic employment, but others have gone on to work in fields such as publishing, operatic production, and commercial editing.

## COURSES

The following provides a general outline of educational opportunities and degree requirements in the programs, but in no way replaces the detailed information given to all prospective students and enrolled students in the department. Up to date information about academic programs and courses is available on the website of the Music Department at http://music.uchicago.edu.

During the first two years of study students take a number of required offerings (numbered between 30000 and 39900) including analysis courses, proseminars in historical periods and in ethnomusicology, courses on particular skills and individual composition lessons, depending on their programs of study. At the same time they take seminars (numbered above 41000), which tend to be more specialized and more advanced. About half of a student's schedule consists of electives, which may include non-required courses in the department, courses given outside the department and reading courses (i.e. independent studies).

Students entering the program without a master's degree in music from another institution take fifteen courses during the first two years of registration (before taking comprehensive exams). Those entering with a master's degree from another institution normally take nine courses in the first year of registration (before taking comprehensive exams).

In addition to courses and other requirements (listed below), students who wish to obtain an M.A. must submit two seminar papers, or a composition of at least eight minutes, for approval by the faculty.

During the second two years of study, students in the scholarly programs are required to take three seminars, and students in composition are expected to develop a minor field of four courses. Standard minors for composition students include ethnomusicology, musicology, theory and analysis, or computer music research. After the comprehensive exams, students fulfill remaining requirements and begin work on the dissertation (see below).

Students entering their program of study without a master's degree in music can expect to complete their course work in three or four years. Those entering with a master's can expect to complete their course work in two or three years.

## COMPREHENSIVE EXAMINATIONS

Students ordinarily take comprehensive exams just prior to the beginning of the third year in the program. Students entering with a master's degree in music from another institution have the option of taking their exams at the beginning of their second year.

Students in composition take three comprehensive examinations:

- The composition of a work based on a set of given guidelines
- An oral examination on ten compositions from the repertory
- A close analysis of a single work or movement
   Students in ethnomusicology take four comprehensive exams:
- Conceptual Foundations: essays covering broad issues of theoretical importance to ethnomusicology and musicology
- Cultural Area: essays demonstrating knowledge of a world musical cultural area
- The identification, from notation and by ear, of music from both European historical and world music traditions
- An additional exam consisting of:
  - · A second cultural area
  - A close analysis of a musical work (in a world musical tradition or in the Western art-music tradition)
  - A historical period of European music corresponding to one of the three given to students in history and theory (see below)

Students in history and theory take four of the following eight examinations (within some distribution guidelines):

Analysis of tonal music

- · Analysis of atonal music
- The identification of music scores of from all periods of music in the European tradition
- Historical essays on music before 1600
- Historical essays on music from 1600 to 1800
- Historical essays on music since 1800
- Essays on the conceptual foundations of musical scholarship, including ethnomusicology
- Essays in music theory

While course work helps prepare students for comprehensive exams, students are expected to be enterprising in their efforts to determine both areas of weakness that they need to work on, and ways to synthesize and interrelate knowledge about history, repertory, theory, and so forth. Students should expect to spend an extended period of time engaged in intensive individual study in preparation for comprehensive exams, particularly during the summer before taking them.

## SPECIAL FIELD EXAMINATION/ DISSERTATION PROPOSAL

After having passed the comprehensive exams, students in music history and theory and in ethnomusicology also take a two-part oral exam at some time during the third or fourth year. For students in ethnomusicology, the first part of the oral tests the student's knowledge of, and ability for, synthetic thought within a selected area of world music. For all students, the exam is a defense of the dissertation prospectus, demonstrating the propriety and feasibility of the topic and the student's knowledge of the existing literature about it. Normally students take this exam in the third or fourth year. The exam is administered by the student's dissertation committee (often including a person from outside the department), with additional faculty members sometimes attending as well.

## DISSERTATION

For students in music history and theory and in ethnomusicology the dissertation for the Ph.D. consists of a book length study that makes an original contribution to research and thought. Students in composition must complete a large scale composition that shows professional competence, as well as a paper demonstrating ability to do advanced work in an area of musical scholarship (ordinarily the student's minor field), normally 30–50 pages in length. All students are required to defend the dissertation before receiving the degree.

## Language Examinations

Language requirements are fulfilled through examinations testing the student's ability to translate about 400 words of a passage of medium difficulty from source materials or other musicological literature, using a dictionary. Three times per year the department administers examinations in French, German, Italian, and Latin. The

department arranges for students to take other languages related to their research or compositional interests.

For the Ph.D. program in composition, one foreign language is required. (This requirement cannot be met by the composer's language of origin.) For the Ph.D. program in ethnomusicology and music history, three languages are required, one of which must be German. Students concentrating in theory are examined in German and one additional language. All master's degrees require one language.

## MUSICIANSHIP EXAMINATIONS

Examinations in practical musicianship skills are administered by the Department of Music. These include examinations in basic musicianship skills and advanced musicianship skills. Examinations in basic musicianship include musical dictation, sight singing, and sight reading at the piano or another instrument in the Western musical tradition. Advanced musicianship skills include three skills to be realized at the piano (for students with advanced keyboard skills) or realized in written form (for students with no advanced keyboard skills): figured bass, reading of open vocal scores in old clefs and orchestral score reading (with a 24-hour preparation period). Other advanced musicianship skills are atonal dictation, transcription of music from oral or improvisatory traditions, improvisation in an improvisatory tradition, and playing in a University ensemble for at least one year concluding with a public concert. Students may petition to play in a recognized performing group other than official University ensembles. Students may also petition to fulfill the ensemble requirement through a solo performance in a university concert.

The number and kind of musicianship examinations for composition, ethnomusicology, history, and theory vary according to the respective programs as specified in the department's Graduate Curriculum. Musicianship examinations are given during each of the three quarters. There is no limit to the number of examinations a student may take at a single sitting, and no limit to the number of times that a student may retake a musicianship examination. The Department offers free, informal, non-credit instruction in these skills. Instruction will be offered on an individual basis. The Department is not obligated to offer instruction in the area chosen by the student.

All departmental master's degrees require successful completion of two musicianship examinations, except composition, which requires successful completion of three.

## COLLOQUIUM

The Department sponsors a colloquium series that typically includes four or five presentations each quarter, normally on Friday afternoons. Colloquium presentations are made by students and faculty in the Department and by visiting scholars or composers from elsewhere. As the most regular departmental occasion for intellectual dialogue and one of the most important opportunities for outside professional contact, colloquium is viewed as an important part of academic life in the Department. It is normally taken for credit during the second part of Scholastic Residence.

## GRADUATE TEACHING

There exist a number of opportunities for teaching during students' graduate careers. The various teaching opportunities range from assistantships to individual course assignments for which students have virtually full responsibility. The kinds of courses taught or assisted by graduate students include those in history, appreciation, theory, ear training, and world music. In addition to these assignments, students may be nominated for Stuart Tave Teaching Fellowships in the Humanities Collegiate Division, which allow advanced graduate students in the humanities to teach upper level undergraduate courses in their own areas of research.

## MUSIC THEORY MENTORING PARTNERSHIP

This program provides opportunities for graduate students in the Department of Music to serve as part time faculty at colleges and universities in the Chicago area. Participants will be hired by the institution to teach or assist in an undergraduate course in music theory or aural skills, and will be compensated at that institution's pay scale for part time faculty. Participants will be assigned a mentor who is a permanent member of the institution's theory faculty, and whose role will be to orient participants to the culture of the institution, and to provide guidance and feedback on syllabi, classroom presentations, grading, and so forth. Eligibility requirements for this program are two years of course work at the University of Chicago (one year if you entered with an MA); AND prior service as a Lecturer or a Course Assistant in a music course at the University of Chicago, or comparable experience at another institution. The program is open to students in ethnomusicology, composition, and historical musicology, as well as to those who are specializing as theorists. In addition to the music theory mentoring program, advanced students frequently secure part time teaching at other local institutions, or in the Graham School of General Studies.

#### Performing Activities

Candidates for degrees are encouraged to perform in one of the many groups sponsored by the department or in one of its recital venues. Performing organizations include the University Symphony Orchestra, the University Chamber Orchestra, the University Wind Ensemble, the New Music Ensemble, the University Chorus, the Motet Choir, the Jazz X-tet, the Central Javanese Gamelan and the Middle East Music Ensemble. Abundant professional and semi-professional opportunities exist throughout the metropolitan area for students who are accomplished performers. Recent departmental students have performed in the University's Rockefeller Chapel Choir, the Civic Orchestra of Chicago, the Chicago Sinfonietta, the Newberry Consort, and Contempo (the University of Chicago Chamber Players), among others.

#### WORKSHOPS

Students in the department frequently attend one of the many interdisciplinary workshops that are organized throughout the University as forums for intensive intellectual exchange between faculty and graduate students. Those that have

recently attracted students in music have included (for example) the workshops on Medieval Art, Liturgy, and Music; the Renaissance; Music and Language; African American Studies; Chicago Public Spaces; History and Philosophy of Science, Economies of the Senses, and the Ethnomusicology Workshop (Ethnoise).

### APPLICATION

Applicants to the programs in music history and theory and in ethnomusicology will be asked to submit two papers as samples of their previous works in addition to the usual application forms, transcripts, letters of recommendation, and GRE scores. Applicants in composition will be asked to submit scores, preferably three, and tapes when they are available.

In addition to their scholastic skills, students need at least a modicum of proficiency in fundamental musical skills in order to succeed in the program. It is expected that entering students have competence in playing a musical instrument or singing, as well as possess basic skills in ear training and music theory.

Prospective applicants seeking more detailed information about the course requirements, exams, etc. than is given here should write to the chair of the admissions committee in the Department of Music for a copy of the Graduate Curriculum. The address is: Department of Music, 1115 E. 58th Street, Chicago, IL 60637, telephone: (773) 702-8484. We will also send more detailed materials on faculty interests and activities and (upon request) on performing groups.

Further information about the various aspects of the graduate program, such as course descriptions, the Graduate Curriculum, and the Graduate Student Handbook, can also be obtained from the Department of Music's home page on the World Wide Web, http://music.uchicago.edu. Students interested in the program can apply online.

The application process for admission and financial aid for all graduate programs in Humanities is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online at http://humanities.uchicago.edu/prospective/admissions.html.

International students must provide evidence of English proficiency by submitting scores from either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS). Questions pertaining to admissions and aid should be directed to humanitiesadmissions@uchicago.edu or (773) 702-1552.

#### MUSIC COURSES

MUSI 31506. Modal Analysis. 100 Units. Instructor(s): Kaley Mason Terms Offered: Autumn

## MUSI 31901. Introduction to Cognitive Musicology. 100 Units.

This course surveys recent research in music cognition and cognitive psychology and explores how it can be applied to music scholarship. We begin with a general review of research on categorization, analogy, and inferential systems. This review is paired with close readings of empirical literature drawn from cognitive science, neuroscience, and music psychology, as well as theoretical work in cognitive linguistics and cognitive anthropology. Student projects focus on applications of research in cognitive science to historical musicology, ethnomusicology, music theory, or music analysis. Weekly lab meetings required.

Instructor(s): L. Zbikowski Terms Offered: Variable

Prerequisite(s): MUSI 15300 or equivalent. Open to nonmajors with consent of instructor.

Note(s): This course typically is offered in alternate years.

Equivalent Course(s): MUSI 25701

MUSI 32600. Pro-Seminar: Music 1700-1800. 100 Units. Instructor(s): Martha Feldman Terms Offered: Autumn

MUSI 32800. Proseminar: Music from 1900-2000. 100 Units.

Instructor(s): Seth Brodsky Terms Offered: Winter 2014

### MUSI 33911. Jewish Music. 100 Units.

Few questions in ethnomusicology and music history remain as enigmatic and yet ideologically charged as, What is Jewish music? With responses ranging from claims that Jewishness defies representation with music to those that argue for a plurality possible only when Jewish culture appropriates the musics of constantly shifting historical contexts, Jewish music has acquired remarkably important resonance in the history of religions and in the meaning of modernity. In this proseminar we approach the richness and diversity of Jewish music as givens and as starting points for understanding of both the sacred and the secular in Jewish culture. The cultural contexts and soundscapes of Jewish music, thus, are not isolated, restricted, for example, to the synagogue or ritual practice, but rather they cross the boundaries between traditions, genres, and even religions. The sound materials and structures of Jewish music, say, the modal ordering of Arabic classical music that is standard for biblical cantillation in Israel, will be treated as complex phenomena that both influence and are influenced by the worlds around Jewish communities. Genres and musical practices will be examined in their full diversity, and we shall move across the repertories of liturgical, folk, art, and popular music.

Instructor(s): P. Bohlman Terms Offered: Variable

Equivalent Course(s): MUSI 23911

## MUSI 33914. Absorption/Distanciation: Wagner, Brecht, Kluge. 100 Units.

Explores Richard Wagner's music-dramas, Bertolt Brecht's plays, and Alexander Kluge's films as a forum for the formulation, circulation, and contestation of absorption and distanciation. While a conventional historical account would map the tensions between absorption and distanciation as a one-way trip, moving from absorption (in Wagner) to distanciation (as coined by Brecht) to distraction (as deployed by Kluge), we will explore how each artist deploys each term to varying effects. Works to be considered include Wagner's *The Flying Dutchman* and *Parsifal*, Brecht's *Man Is Man* and *The Measures Taken*, and Kluge's *Yesterday Girl* and *The Power of Emotions*. Readings by each artist, as well as by Theodor Adorno, Walter Benjamin, Michael Fried, Miriam Hansen, Andreas Huyssen, and Gertrud Koch. In English.

Instructor(s): D. Levin Terms Offered: Winter

Equivalent Course(s): GRMN 33914,CMST 28304,CMST 38304,TAPS 28439,MUSI 29614,GRMN 29614

#### MUSI 34000. Composition Lessons. 100 Units.

Instructor(s): Athony Cheung, Marta Ptaszynska, August Read Thomas Terms Offered: Autumn, Winter, Spring

## MUSI 34700. Introduction to Computer Music. 100 Units.

Instructor(s): H. Sandroff Terms Offered: Autumn

Prerequisite(s): Consent of instructor. Rudimentary musical skills (but not technical knowledge) required.

Note(s): Basic Macintosh skills helpful. This course is offered in alternate years. Equivalent Course(s): MUSI 26300

### MUSI 35800. Tuning Theory. 100 Units.

This course begins with a description of the logarithmic perception of pitch increments. We then cover the historically important tunings of the diatonic scale-just intonation, Pythagorean and meantone tunings, and twelve-note equal tuning. A parametric representation is described that reveals that the historic tunings are particular members of a general family of diatonic tunings. We also discuss the individual chromatic properties of certain equal tunings, focusing on the tunings of 12, 15, 17, 19, and 31 notes.

Instructor(s): E. Blackwood Terms Offered: Spring

Prerequisite(s): Ability to read music

Note(s): This course typically is offered in alternate years.

Equivalent Course(s): MUSI 25800

## MUSI 38214. Improvisational Dramaturgy. 100 Units.

Team-taught by Catherine Sullivan and visiting composers Sean Griffin and George Lewis, Improvisational Dramaturgy explores interdisciplinary and improvisational strategies for performance. Course work will be integrated with the development of a staging of an operatic composition by Lewis. Tentatively titled "Afterword," the piece explores the ecology of Lewis's 2008 award-winning book, *A Power Stronger Than Itself: The A.A.C.M. and American Experimental Music.* Issues of public assembly, spatial language, music as social text, documentation, collaboration, and the dynamics of improvisation will be explored in theory, history, and practice. The class will work as an ensemble, contributing original material and working with various groups both on and off campus. Students working in all disciplines are welcome. This course is sponsored by a Mellon Fellowship for Arts Practice and Scholarship at the Gray Center for Arts and Inquiry.

Instructor(s): C. Sullivan, S. Griffin, G. Lewis Terms Offered: Spring Equivalent Course(s): ARTV 23833,ARTV 33833,CRES 23833,CRES 38333,MUSI 26114,TAPS 28429

#### MUSI 44713. Post-Punk. 100 Units.

Instructor(s): Travis Jackson Terms Offered: Autumn 2013



# Department of Near Eastern Languages and Civilizations

## http://nelc.uchicago.edu/courses

#### Chair

- Theo P. van den Hout, Oriental Institute Professors
- Fred M. Donner
- Cornell Fleischer
- McGuire Gibson, Oriental Institute
- Norman Golb
- Janet H. Johnson, Oriental Institute
- Dennis G. Pardee
- · Robert K. Ritner, Oriental Institute
- Martha T. Roth, Oriental Institute
- Gil Stein, Oriental Institute
- Matthew W. Stolper, Oriental Institute
- Theo P. van den Hout, Oriental Institute
- John E. Woods, History Associate Professors
- Orit Bashkin
- Rebecca Hasselbach, Oriental Institute
- · Hakan Karateke
- Franklin D. Lewis
- Brian Muhs, Oriental Institute
- Tahera Qutbuddin
- David Schloen, Oriental Institute
- Ada Holly Shissler
- Christopher Woods, Oriental Institute
- K. Aslihan Yener, Oriental Institute Assistant Professors
- Ahmed El Shamsy
- Petra Goedegebuure, Oriental Institute
- Nadine Moeller, Oriental Institute
- Na'ama Rokem
  - Senior Lecturers
- Ariela Finkelstein
- Saeed Ghahremani

#### Lecturers

- Osama Abu-Eledam
- · Kagan Arik
- Stuart Creason
- Muhammad Eissa
- · Noha Forster
- Hripsime Haroutunian
- Kay Heikkinen

Research Associates (Associate Professors)

- W. Raymond Johnson, Oriental Institute
- Donald S. Whitcomb, Oriental Institute Research Associate (Assistant Professors)
- Scott Branting Emeritus Faculty
- · Lanny D. Bell, Oriental Institute
- Robert D. Biggs, Oriental Institute
- · Menachem Brinker
- John A. Brinkman, Oriental Institute
- Richard L. Chambers
- · Miguel Civil, Oriental Institute
- · Robert Dankoff
- Peter F. Dorman, Oriental Institute
- Walter T. Farber, Oriental Institute
- Gene B. Gragg, Oriental Institute
- Harry A. Hoffner, Oriental Institute
- Halil Inalcik, History
- · Wadad Kadi
- · Heshmat Moayyad
- John R. Perry
- Jaroslav Stetkevych
- William Sumner, Oriental Institute
- Edward F. Wente, Oriental Institute

## THE DEPARTMENT

The work of the department encompasses the ancient civilizations of the Near East, Near Eastern Judaica, and the Islamic civilizations of the Middle East, including Egypt and North Africa, and the history, languages, and literatures of the modern Middle East.

The fields of study in which M.A. and Ph.D. programs are currently offered are, in the Ancient Section: Ancient Near Eastern History, Comparative Semitics, Cuneiform Studies (Assyriology, Hittitology, Sumerology), Egyptology, Hebrew

Bible and the Ancient Near East, Near Eastern Art and Archaeology (Anatolian, Egyptian, Iranian, Islamic, Mesopotamian, Syro-Palestinian), Near Eastern Judaica, and Northwest Semitic Philology; and in the Medieval and Modern Section: Arabic Language and Literature, Islamic History and Civilization, Islamic Thought, Medieval Judaica and Judeo- Arabic, Modern Hebrew Language and Literature, Persian Language and Literature, and Ottoman and Turkish Studies. The department also has a joint program with Linguistics and offers courses in Armenian and Central Asian studies in collaboration with other departments at the University.

The department has two main objectives. First, it strives to provide the specific course work and training needed for its students to develop into outstanding scholars in their chosen fields. Second, it offers more general courses that provide its students a broader background in areas outside their specific fields while presenting students in other departments the opportunity to incorporate relevant Middle Eastern material into their own studies. The department also publishes the *Journal of Near Eastern Studies*, one of the leading academic journals in ancient Near Eastern and Islamic studies.

## THE ORIENTAL INSTITUTE

The department is associated with the Oriental Institute, a research institute dedicated to the study of the origin and development of civilization in the ancient Near East. The Institute maintains several expeditions in the field, and research projects are carried on in its headquarters at the University. Its research archives, manuscript collection, documents from Oriental Institute excavations, and similar materials are resources for the students in the department. The department's office is housed in the Oriental Institute building, and many of its members belong to the faculty of the Oriental Institute.

## THE CENTER FOR MIDDLE EASTERN STUDIES

The department is also associated with the Center for Middle Eastern Studies, which offers a master's degree in Middle Eastern studies and coordinates activities at the University dealing with the Middle East in the Islamic and modern periods. Many members of the department faculty are also members of the Center's executive committee; and the workshops, lectures, language circles, and similar activities of the Center are, like those of the Oriental Institute, a resource for the students in the department.

## THE DEGREE OF DOCTOR OF PHILOSOPHY

Students with an undergraduate degree may apply directly to the department's Ph.D. program; a master's degree in a related field is not prerequisite. The department does not admit students for a terminal M.A. degree, although work done in the first two years of the Ph.D. program qualifies students to receive an M.A. degree. This interim M.A. normally requires the completion of 18 courses, of which 15 must be taken for a quality grade while three may be taken on a pass/fail basis. All students must high pass one of the two required modern research

language reading exams (typically French and German) before the beginning of their second year and complete an M.A. thesis in the second year.

At the end of the second year, all students are reviewed and a determination made as to whether they will be allowed to continue in the Ph.D. program. Students who do continue build upon the work used for the M.A. degree; normally the completion of additional 9-18 courses is required, depending on the field, before embarking upon research for the doctoral dissertation. Exact requirements vary by field, but all students must high pass their second modern research language reading exam before the beginning of their third year and pass a battery of comprehensive exams, usually at the end of their fourth year. A dissertation proposal of original research to be undertaken is presented to the faculty at a public hearing, usually in the fifth year; acceptance allows the student to be admitted to candidacy and to continue the research that will lead to the completed dissertation. A formal dissertation defense is required before the Ph.D. degree is awarded.

Because the department believes that firsthand knowledge and experience of the Middle East are an essential part of a student's training, advanced students are encouraged to apply for grants to support study in a Middle Eastern country, whether for language acquisition, archaeological field work, or dissertation research.

## **INQUIRIES**

Specific information about the department and its programs may be obtained from our website (http://nelc.uchicago.edu/) or by e-mail (ne-lc@uchicago.edu). Within the framework outlined above, individual requirements are established for each student in consultation with the faculty adviser and the section counselor.

#### APPLICATION

The application process for admission and financial aid for all graduate programs in the Division of the Humanities is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department-specific information is available online at http://humanities.uchicago.edu/prospective/admissions.html.

Questions pertaining to admissions and aid should be directed to humanitiesadmissions@uchicago.edu or (773) 702-1552.

Foreign students must provide evidence of English proficiency by submitting scores from either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS).

We encourage you to check our website at http://nelc.uchicago.edu/ particularly with regard to determining your field of study for your application. The application form has a place to indicate the department/program; from the pull down menu choose Near Eastern Languages and Civilizations. For field of specialization, please be sure to enter one of the fields of study exactly as listed on NELC's web page. We need these fields to sort information in our database. You may wish to specify your area of interest further in your statement of purpose.

## **COURSES**

Modern Languages: Language acquisition is taught at the elementary and intermediate levels in modern Arabic, Armenian, Hebrew, Kazakh, Persian, Turkish, and Uzbek with advanced level courses in Arabic and Turkish. A wide variety of literature courses are taught in the various languages.

Ancient Languages: Courses are offered in the fundamentals of Akkadian, Ancient Anatolian Languages, Egyptian, Ge'ez, Classical Hebrew, Sumerian, and Ugaritic, while more advanced courses cover specific genres of ancient texts dealing with religion, medicine, law, government, history, etc.

Near Eastern Art and Archaeology: Courses in Anatolian, Egyptian, Islamic, Mesopotamian, and Syro-Palestinian art and archaeology offer grounding in site archaeology and the material culture of the ancient Near East and include instruction on archaeological method and theory, landscape archaeology, computer applications, etc.

Near Eastern History and Civilization: A wide variety of courses cover the history, religion, law, literature (in translation), culture, and thought of the many ancient and modern civilizations of this region.

Please see the University's *Time Schedules* for specific course offerings in a given quarter.

# NEAR EASTERN LANGUAGES & CIVILIZATIONS - AKKADIAN COURSES

AKKD 30310. Old Akkadian. 100 Units.

Instructor(s): Maiocchi Terms Offered: Winter

#### AKKD 30330. Babylonian and Assyrian Commentaries. 100 Units.

This course involves readings in cuneiform commentaries on lexical, literary, medical, astronomical, and omen texts. Special focus will be given to the relationship between commentaries and the lexical tradition, forms of intertextuality, commentaries as text exemplars of particular professions and fields of knowledge, forms of ancient rhetoric and argumentation, and the question of what commentaries reveal about the canonicity of their base texts.

Instructor(s): Wee Terms Offered: Spring

Prerequisite(s): 1 year (= 3 quarters) of Akkadian plus instructor's consent. Proficiency in Sumerian would be helpful, but not absolutely necessary.

AKKD 30401. Topics of Akkadian Literary and Scientific Text. 100 Units. Instructor(s): R. Biggs

AKKD 49900. Reading and Research: Akkadian, Reading and Research. 100 Units.

Instructor(s): STAFF Terms Offered: ,Autumn, Winter, Spring

Note(s): Select section from faculty list

## AKKD 49900. Reading and Research: Akkadian, Reading and Research. 100 Units.

Instructor(s): STAFF Terms Offered: ,Autumn, Winter, Spring Note(s): Select section from faculty list

## NEAR EASTERN LANGUAGES & CIVILIZATIONS - ANCIENT ANATOLIAN LANGUAGES COURSES

#### AANL 30701. Hittite Linguistics. 100 Units.

This course explores the ways linguistic theory can be used in the study of extinct languages.

On the one hand, we will investigate how to use typological data and the predictive force of modern theories to critically assess claims regarding grammatical issues in extinct languages. In case of a conflict between general linguistics and grammatical descriptions arising from the philological tradition, students will be expected to indicate how to remedy this situation, or even to solve the issue.

On the other hand, we will start developing a method for fact-finding in extinct languages. In the absence of native speakers it becomes nearly impossible to judge the ungrammaticality of a sentence, because the absence of a construction may simply be an accident of transmission. So, instead of using form to arrive at judgments regarding structure, meaning, or use (the semasiological approach), we will reverse the process and start with well-defined concepts from the fields of morpho-syntax, semantics and pragmatics. Through this onomasiological approach we will be able to detect phenomena that may have gone unnoticed in the philological tradition.

The course will focus on three topics that are known to be relevant for several extinct languages of the Mediterranean:

- 1. Ergativity (typology, morpho-syntax, semantics)
- 2. Topic and Focus (morpho-syntax, information structure)
- 3. Lexical and grammatical aspect (semantics, morphology, discourse grammar)

This list of topics may be modified depending on the interests of the students.

Instructor(s): P. Goedegebuure Terms Offered: Spring

Prerequisite(s): AANL 10103 and Consent of the Instructor

#### AANL 30800. Methods in Hittitology. 100 Units.

This class offers a general introduction into the discipline of Hittitology from a historical perspective. Topics to be discussed: history of scholarship (both philology and archaeology), focusing on text dating, interpretation of findspots, and major tools in the field.

Instructor(s): van den Hout, Theo Terms Offered: Autumn Prerequisite(s): Basic knowledge of Hittite and cuneiform

### AANL 49900. Reading and Research. 100 Units.

Instructor(s): STAFF Terms Offered: Autumn, Winter, Spring

Prerequisite(s): Select section from faculty list

### NEAR EASTERN LANGUAGES & CIVILIZATIONS - ARABIC COURSES

**ARAB 30201-30202-30203. High Intermediate Modern Standard Arabic I-II-III.** This is a three course sequence in High Intermediate Modern Standard Arabic.

#### ARAB 30201. High Intermediate Modern Standard Arabic I. 100 Units.

Instructor(s): K. Heikkinen Terms Offered: Autumn

Prerequisite(s): ARAB 20103 or equivalent

Note(s): Open to qualified undergraduates with consent of the instructor

## ARAB 30202. High Intermediate Modern Standard Arabic II. 100 Units.

Instructor(s): K. Heikkinen Terms Offered: Winter

Prerequisite(s): ARAB 30201 or equivalent

#### ARAB 30203. High Intermediate Modern Standard Arabic III. 100 Units.

Instructor(s): K. Heikkinen Terms Offered: Spring

Prerequisite(s): ARAB 30202 or equivalent

#### ARAB 30202-30203. High Intermediate Modern Standard Arabic II-III.

## ARAB 30202. High Intermediate Modern Standard Arabic II. 100 Units.

Instructor(s): K. Heikkinen Terms Offered: Winter

Prerequisite(s): ARAB 30201 or equivalent

#### ARAB 30203. High Intermediate Modern Standard Arabic III. 100 Units.

Instructor(s): K. Heikkinen Terms Offered: Spring

Prerequisite(s): ARAB 30202 or equivalent

#### ARAB 30203. High Intermediate Modern Standard Arabic III. 100 Units.

Instructor(s): K. Heikkinen Terms Offered: Spring

Prerequisite(s): ARAB 30202 or equivalent

#### ARAB 30301-30302-30303. High Intermediate Classical Arabic I-II-III.

This is a three-segment course offered in three quarters; Autumn, Winter and Spring. The main objective of the complete three segment is to develop strong pedagogical strategies in the four Arabic language skills to acquire proficiency in handling Arabic classical texts. By the end of the three quarters students should know the distinctive features of classical Arabic texts and the various genres and sources of such texts. They will build strong command on expanded grammatical features and structural rules governing classical texts of different variations. Students will be able to produce written documents reflecting reading comprehension, personal opinions and text critique. Students should be able to make oral presentation and conduct research using electronic resources as well as traditional classical sources. The class is conducted entirely in Arabic with occasional use of English in translation and explanation of complex cultural and linguistic issues.

#### ARAB 30301. High Intermediate Classical Arabic I. 100 Units.

Instructor(s): STAFF Terms Offered: Autumn Prerequisite(s): ARAB 20103 or equivalent

### ARAB 30302. High Intermediate Classical Arabic II. 100 Units.

Instructor(s): STAFF Terms Offered: Winter Prerequisite(s): ARAB 30201 or equivalent

## ARAB 30303. High Intermediate Classical Arabic III. 100 Units.

Instructor(s): STAFF Terms Offered: Spring Prerequisite(s): ARAB 30302 or equivalent

#### ARAB 30302-30303. High Intermediate Classical Arabic II-III.

This is a three-segment course offered in three quarters; Autumn, Winter and Spring. The main objective of the complete three segment is to develop strong pedagogical strategies in the four Arabic language skills to acquire proficiency in handling Arabic classical texts. By the end of the three quarters students should know the distinctive features of classical Arabic texts and the various genres and sources of such texts. They will build strong command on expanded grammatical features and structural rules governing classical texts of different variations. Students will be able to produce written documents reflecting reading comprehension, personal opinions and text critique. Students should be able to make oral presentation and conduct research using electronic resources as well as traditional classical sources. The class is conducted entirely in Arabic with occasional use of English in translation and explanation of complex cultural and linguistic issues.

## ARAB 30302. High Intermediate Classical Arabic II. 100 Units.

Instructor(s): STAFF Terms Offered: Winter Prerequisite(s): ARAB 30201 or equivalent

#### ARAB 30303. High Intermediate Classical Arabic III. 100 Units.

Instructor(s): STAFF Terms Offered: Spring Prerequisite(s): ARAB 30302 or equivalent

#### ARAB 30303. High Intermediate Classical Arabic III. 100 Units.

Instructor(s): STAFF Terms Offered: Spring Prerequisite(s): ARAB 30302 or equivalent

#### ARAB 30390. Arabic in Social Context. 100 Units.

Designed for the advanced student of MSA, this course aims to improve listening comprehension and instill an awareness of the social associations accompanying different speech/writing styles. Students will intensively listen to audio /video materials clustered around the themes of diglossia and code-switching; gendered discourse; urban-rural; class. A heavily aural course, class activities will involve student presentations (group and solo), discussion groups, and to a lesser degree, textual analysis.

Instructor(s): N. Forster Terms Offered: Autumn

Prerequisite(s): 3 years of Arabic or consent of instructor

Note(s): This course is open to qualified undergraduate students

#### ARAB 30551. History and Modern Arabic Literature. 100 Units.

The class studies historical novels and the insights historians might gain from contextualizing and analyzing them. The Arab middle classes were exposed to a variety of newspapers and literary and scientific magazines, which they read at home and in societies and clubs, during the late nineteenth century and the early twentieth. Such readers learned much about national identity, gender relations and Islamic reform from historical novels popularized in the local press. Some of these novels were read not only by adults, but also by children, and consequently their ideas reached a very large audience. The novels' writers paid great attention to debates concerning political theory and responded to discourses that were occurring in the public spheres of urban Middle East centers and, concurrently, appropriated and discussed themes debated among Orientalists and Western writers. The class will explore these debates as well as the connections between the novel and other genres in classical Arabic literature which modern novels hybridized and parodied. It will survey some of the major works in the field, including historical novels by Gurji Zaydan, Farah Antun, Nikola Haddad, and Nagib Mahfuz.

Instructor(s): O. Bashkin Terms Offered: Spring

Prerequisite(s): Reading knowledge of Arabic (namely three years of Arabic at least) is required; students are expected to read the novels as part of their homework assignment.

Note(s): Open to qualified undergraduates

## ARAB 40911. Contemporary Egyptian Fiction: The Novels of Gamal Ghitani. 100 Units.

Ibn Iyas and Ibn al-`Arabi as alter-personas in the novels of Gamal Ghitani. Including the works of Ibn Iyas and Ibn al-`Arabi as well as novels by Gamal Ghitani, *Zayni Barakat* and *Tajalliyat*.

Instructor(s): Gamal Ghitani Terms Offered: Autumn

Prerequisite(s): Three years of Arabic

#### ARAB 49900. Reading and Research. 100 Units.

Instructor(s): STAFF Terms Offered: Autumn, Winter, Spring

Note(s): Select section from faculty list

#### NEAR EASTERN LANGUAGES & CIVILIZATIONS - ARAMAIC COURSES

#### ARAM 49900. Reading and Research. 100 Units.

Instructor(s): STAFF Terms Offered: Autumn, Winter, Spring

Note(s): Select section from faculty list

# Near Eastern Languages & Civilizations - Armenian Courses

#### ARME 49900. Reading and Research. 100 Units.

Instructor(s): STAFF Terms Offered: Autumn, Winter, Spring

Note(s): Select section from faculty list

# NEAR EASTERN LANGUAGES & CIVILIZATIONS - EGYPTIAN COURSES

#### EGPT 30120. Introduction to Demotic. 100 Units.

This course provides a basic introduction to the grammar, vocabulary, and orthographic styles of the administrative and literary stage of the Egyptian language and script used in the Late Period (into the Roman Empire).

Instructor(s): R. Ritner Terms Offered: Winter Prerequisite(s): EGPT 10201 and/or EGPT 20210

Equivalent Course(s): ANCM 32100

#### EGPT 30121. Demotic Texts. 100 Units.

Building on the basic grammar, vocabulary, and orthographic styles learned in EGPT 30120, this course focuses on the reading and analysis of various Demotic texts.

Instructor(s): R. Ritner Terms Offered: Spring

Prerequisite(s): EGPT 30120 or Consent of the Instructor

## EGPT 30211. Introduction to Ancient Egyptian Art. 100 Units.

Instructor(s): N. Moeller Terms Offered: Spring

## EGPT 43700. Ramesside Historical Inscriptions. 100 Units.

Study of Ramesside Historical Inscriptions, both on temple walls and in P. Harris.

Instructor(s): J. Johnson Terms Offered: Winter

Prerequisite(s): Knowledge of Late Egyptian and hieratic necessary.

#### EGPT 49000. Thesis Research: Egyptology. 100 Units.

Instructor(s): STAFF Terms Offered: Autumn 2013

Note(s): Select section from faculty list

#### EGPT 49900. Reading and Research: Egyptology. 100 Units.

Instructor(s): STAFF Terms Offered: Autumn Note(s): Selection section from faculty list

## NEAR EASTERN LANGUAGES & CIVILIZATIONS - GE'EZ COURSES

#### GEEZ 49900. Reading and Research. 100 Units.

Instructor(s): STAFF Terms Offered: Autumn, Winter, Spring

Note(s): Select section from faculty list

### NEAR EASTERN LANGUAGES & CIVILIZATIONS - HEBREW COURSES

#### HEBR 30501-30502-30503. Advanced Modern Hebrew I-II-III.

This course assumes that students have full mastery of the grammatical and lexical content at the intermediate level. However, there is a shift from a reliance on the cognitive approach to an emphasis on the expansion of various grammatical and vocabulary-related subjects. Students are introduced to sophisticated and more complex syntactic constructions, and instructed how to transform simple sentences into more complicated ones. The exercises address the creative effort on the part of the student, and the reading segments are longer and more challenging in both style and content. The language of the texts reflects the literary written medium rather than the more informal spoken style, which often dominates the introductory and intermediate texts.

#### HEBR 30501, Advanced Modern Hebrew I, 100 Units.

Instructor(s): STAFF Terms Offered: Autumn Prerequisite(s): HEBR 20503 or equivalent

#### HEBR 30502. Advanced Modern Hebrew II. 100 Units.

Instructor(s): STAFF Terms Offered: Winter

Prerequisite(s): HEBR 30501 or consent of instructor

#### HEBR 30503. Advanced Modern Hebrew III. 100 Units.

Instructor(s): STAFF Terms Offered: Spring

Prerequisite(s): HEBR 30502 or consent of instructor

#### HEBR 30502. Advanced Modern Hebrew II. 100 Units.

Instructor(s): STAFF Terms Offered: Winter

Prerequisite(s): HEBR 30501 or consent of instructor

#### HEBR 30503. Advanced Modern Hebrew III. 100 Units.

Instructor(s): STAFF Terms Offered: Spring

Prerequisite(s): HEBR 30502 or consent of instructor

#### HEBR 40410. Modern Hebrew Language in Israeli Media I. 100 Units.

This course is the fourth in the series of Modern Hebrew classes. It is designed to meet the needs of students who studied at least three years of Modern Hebrew and want to both sustain and improve their knowledge. The course offers advanced study of grammar, vocabulary, and stylistics and intensive practice speaking and writing Hebrew. The course includes readings in modern Hebrew prose, poetry and non-fiction; TV broadcasts and movies, with emphasis on cultural & social issues.

Instructor(s): STAFF Terms Offered: Autumn Prerequisite(s): Hebrew 30105 or equivalent

## HEBR 40411. Modern Hebrew Language in Israeli Media II. 100 Units.

Instructor(s): STAFF Terms Offered: Winter Prerequisite(s): Hebrew 30105 or equivalent

#### HEBR 40412. Modern Hebrew language in the Israeli Media III. 100 Units.

Instructor(s): STAFF Terms Offered: Spring Prerequisite(s): Hebrew 30105 or equivalent

### HEBR 49900. Reading Course: Hebrew. 100 Units.

Instructor(s): STAFF Terms Offered: Autumn

Note(s): Select section from faculty list

## NEAR EASTERN LANGUAGES & CIVILIZATIONS - KAZAK COURSES

### KAZK 49900. Reading and Research. 100 Units.

Instructor(s): STAFF Terms Offered: Autumn, Winter, Spring

Note(s): Select section from faculty list

## NEAR EASTERN LANGUAGES & CIVILIZATIONS - NEAR EASTERN ART AND ARCHAEOLOGY COURSES

### NEAA 30035. Zooarchaeology. 100 Units.

This course introduces the use of animal bones in archaeological research. Students gain hands-on experience analyzing faunal remains from an archaeological site in the Near East. Topics include: (1) identifying, aging, and sexing animal bones; (2) zooarchaeological sampling, measurement, quantification, and problems of taphonomy; (3) computer analysis of animal bone data; and (4) reconstructing prehistoric hunting and pastoral economies (e.g., animal domestication, hunting strategies, herding systems, seasonality, pastoral production in complex societies). Instructor(s): G. Stein Terms Offered: Winter

Prerequisite(s): Introductory course in archaeology

Equivalent Course(s): NEAA 20035

## NEAA 30045. Economic Organization of Ancient Complex Societies. 100 Units.

This course provides undergraduate and graduate students with an overview of some of the basic theoretical and methodological issues involved in the study of ancient complex societies, primarily through archaeological evidence supplemented by textual data.

Instructor(s): G. Stein Terms Offered: Spring

Equivalent Course(s): NEAA 20045, ANTH 26740, ANTH 36740

#### NEAA 30061. Ancient Landscapes I. 100 Units.

,The landscape of the Near East contains a detailed and subtle record of environmental, social, and economic processes that have obtained over thousands of years. Landscape analysis is therefore proving to be fundamental to an understanding of the processes that underpinned the development of ancient Near Eastern society. This class provides an overview of the ancient cultural landscapes of this heartland of early civilization from the early stages of complex societies in the fifth and sixth millennia B.C. to the close of the Early Islamic period around the tenth century A.D.

Instructor(s): ,S. Branting Terms Offered: ,Autumn

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Instructor(s): ,S. Branting Terms Offered: ,Autumn

## NEAA 30062. Ancient Landscapes II. 100 Units.

Instructor(s): S. Branting Terms Offered: Winter

#### NEAA 30091. Field Archaeology. 300 Units.

Instructor(s): N. Moeller Terms Offered: Autumn

Prerequisite(s): This course is for students that will be overseas participating in an Archaeological Field Project. Consent of instructor required.

#### NEAA 30131. Problems in Mesopotamian Archaeology. 100 Units.

Instructor(s): M. Gibson Terms Offered: Autumn

Prerequisite(s): At least Intro to Mesopotamian Archeology AND Consent of Instructor.

Note(s): Open to qualified undergraduate students.

## NEAA 30300. The Site of Tell el-Dabca in its Geo-Historical Setting. 100 Units.

Tell el-Dabca, ancient Avaris is one of the most important sites for settlement archaeology in Egypt. Due to its favorable location Tell el-Dabca developed into a major trade hub of the second millennium BC and became the capital of the Hyksos dynasty, the first foreign dynasty ruling over Egypt. With its mixed population of Egyptian and Asiatic settlers from the neighboring Levantine region (Syria-Palestine) the site furthermore offers the opportunity to link the material culture of both regions and is crucial for matching the chronologies of the Eastern Mediterranean. The goal of the seminar is to gain insight into the cosmopolite atmosphere of the city, the assimilation and acculturation of foreigners in Egypt, their changing identity and ethnicity as well as their construction of power. Furthermore the layout of the city in its specific environmental surrounding in the Eastern Nile delta provides an overview on Ancient Egyptian settlement structure, different neighborhoods and ancient living conditions. As one of the sites with an excavation history of more than 45 years different strategies to investigate such a huge city can be exemplified and models for future excavations will be discussed Instructor(s): M. Mueller Terms Offered: Autumn

Prerequisite(s): Reading knowledge of German, NEAA 30001, 30002

NEAA 30801. Art, Architecture, and Identity in the Ottoman Empire. 100 Units. Though they did not compose a "multi-cultural society" in the modern sense, the ruling elite and subjects of the vast Ottoman Empire came from a wide variety of regional, ethnic, linguistic, and religious backgrounds. The dynamics of the Empire's internal cultural diversity, as well as of its external relations with contemporary courts in Iran, Italy, and elsewhere, were continuously negotiated and renegotiated in its art and architecture. This course examines classical Ottoman architecture, arts of the book, ceramics, and textiles. Particular attention is paid to the urban transformation of Byzantine Constantinople into Ottoman Istanbul after 1453, and to the political, technical, and economic factors leading to the formation of a distinctively Ottoman visual idiom disseminated through multiple media in the sixteenth century.

Instructor(s): P. Berlekamp Terms Offered: Winter

Equivalent Course(s): ARTH 23400, ARTH 33400, NEAA 20801

#### NEAA 49900. Reading and Research. 100 Units.

Instructor(s): STAFF Terms Offered: Autumn, Winter, Spring

Note(s): Select section from faculty list

# NEAR EASTERN LANGUAGES & CIVILIZATIONS - NEAR EASTERN HISTORY AND CIVILIZATION COURSES

## NEHC 30020. Pedagogy Seminar. 100 Units.

This seminar meets four times during the quarter.

Instructor(s): STAFF Terms Offered: Winter

Prerequisite(s): Grad students only

### NEHC 30401-30402-30403. Jewish History and Society I-II-III.

Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies. Students explore the ancient, medieval, and modern phases of Jewish culture(s) by means of documents and artifacts that illuminate the rhythms of daily life in changing economic, social, and political contexts. Texts in English.

### NEHC 30401. Jewish History and Society I: Ancient Jerusalem. 100 Units.

The course will survey biblical, archaeological, and other early sources, as well as scholarly literature, to trace a history of ancient Jerusalem and to probe the religious significance of the city, its king, the temple that stood there, the activities that took place in and around it, and ideas that developed about it. Along the way, the course will model the modern, academic study of biblical literature, of the history and society of ancient Israel and Judea, and of religion. Instructor(s): S. Chavel Terms Offered: Autumn

Equivalent Course(s): JWSC 20001, CRES 20001, HIST 22113, NEHC 20401, RLST 20604, BIBL 31400

## NEHC 30402. Jewish History and Society II: Jews in the Modern World. 100 Units.

Jews under Muslim Rule. The class covers Jewish-Muslim relations from the early Islamic state to the modern period. The history of Jews in Arab lands was typically told as either as a model of a harmonious coexistence, or, conversely, as a tale of perpetual persecution. Our class will try to read beyond these modes of analysis, by looking into particular contexts and the unique historical circumstances of a variety of Jewish communities whose members lived under Muslim rule. The class will explore the ways in which Jewish culture—namely, theology, grammar, philosophy, and literature—thrived, and was transformed, in the medieval and early modern periods, as a result of its fruitful interactions with Muslim and Arab cultures. Likewise we will study how liberal and communist Jews struggled to attain equal rights in their communities, and their understanding of various concepts of citizenship. Finally, the class will study the problems faced by Jews from Muslim lands as they immigrated to Israel in the 1950s. The class will discuss such concepts as "Sephardim," "Mizrahim," and "Arab-Jews," as well as "Dhimmis" and "People of the Book" and investigate how their meaning changed in various historical contexts. Instructor(s): O. Bashkin Terms Offered: Winter Equivalent Course(s): JWSC 20002, CRES 20002, HIST 22406, NEHC 20402

## NEHC 30403. Jewish History and Society III: Narratives of Assimilation. 100 Units.

This course offers a survey of the manifold artistic strategies of (self-)representations of Jewish writers from East Central Europe from the perspective of assimilation, its trials, successes, and failures. During this course, we will inquire how the condition called assimilation and its attendants—secularization, acculturation, trans-nationalism, etc.—have been explored by Mary Antin, Anzia Yezierska, Adolf Rudnicki, Eva Hoffman, and others. Students will be acquainted with problems of cultural alienation and linguistic isolation, hybrid identity, and cultural transmission in conjunction with theoretical approaches by Zygmunt Bauman, Benjamin Harshav, Ryszard Nycz. All texts will be read in English.

Instructor(s): B. Shallcross Terms Offered: Spring Equivalent Course(s): JWSC 20003,HIST 22202,NEHC 20403

#### NEHC 30402-30403. Jewish History and Society II-III.

## NEHC 30402. Jewish History and Society II: Jews in the Modern World. 100 Units.

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Equivalent Course(s): JWSC 20002, CRES 20002, HIST 22406, NEHC 20402

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Instructor(s): B. Shallcross Terms Offered: Spring

Equivalent Course(s): JWSC 20003, HIST 22202, NEHC 20403

#### NEHC 30404-30405-30406. Jewish Thought and Literature I-II-III.

Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies. Students in this sequence explore Jewish thought and literature from ancient times until the modern era through a close reading of original sources. A wide variety of works is discussed, including the Hebrew Bible (Old Testament) and texts representative of rabbinic Judaism, medieval Jewish philosophy, and modern Jewish culture in its diverse manifestations. Texts in English.

NEHC 30404. Jewish Thought and Literature I: Introduction to the Hebrew Bible. 100 Units.

Instructor(s): J. Stackert Terms Offered: Autumn

## NEHC 30405. Jewish Thought and Literature II: The Bible and Archaeology. 100 Units.

In this course we will look at how interpretation of evidence unearthed by archaeologists contributes to a historical-critical reading of the Bible, and vice versa. We will focus on the cultural background of the biblical narratives, from the stories of Creation and Flood to the destruction of the Jerusalem temple by the Romans in the year 70. No prior coursework in archaeology or biblical studies is required, although it will be helpful for students to have taken JWSC 20004 (Introduction to the Hebrew Bible) in the Autumn quarter

Instructor(s): D. Schloen Terms Offered: Winter Equivalent Course(s): NEHC 20405, JWSC 20005

## NEHC 30406. Jewish Thought and Literature III: Biblical Voices in Modern Hebrew Literature. 100 Units.

The Hebrew Bible is the most important intertextual point of reference in Modern Hebrew literature, a literary tradition that begins with the (sometimes contested) claim to revive the ancient language of the Bible. In this course, we will consider the Bible as a source of vocabulary, figurative language, voice and narrative models in modern Hebrew and Jewish literature, considering the stakes and the implications of such intertextual engagement. Among the topics we will focus on: the concept of language-revival, the figure of the prophet-poet, revisions and counter-versions of key Biblical stories (including the story of creation, the binding of Isaac and the stories of King David), the Song of Songs in Modern Jewish poetry.

Instructor(s): N. Rokem Terms Offered: Spring

#### NEHC 30405-30406. Jewish Thought and Literature II-III.

## NEHC 30405. Jewish Thought and Literature II: The Bible and Archaeology. 100 Units.

In this course we will look at how interpretation of evidence unearthed by archaeologists contributes to a historical-critical reading of the Bible, and vice versa. We will focus on the cultural background of the biblical narratives, from the stories of Creation and Flood to the destruction of the Jerusalem temple by the Romans in the year 70. No prior coursework in archaeology or biblical studies is required, although it will be helpful for students to have taken JWSC 20004 (Introduction to the Hebrew Bible) in the Autumn quarter

Instructor(s): D. Schloen Terms Offered: Winter Equivalent Course(s): NEHC 20405, JWSC 20005

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Instructor(s): N. Rokem Terms Offered: Spring

#### NEHC 30510. Byzantine Military History. 100 Units.

Interpretation of major issues of institutional, operational, and strategic history between the fourth and fourteenth centuries. Readings include selections from Byzantine military manuals and historians, as well as recent historical assessments. Among topics are debates on the theme system and numbers. Final examination and short paper.

Instructor(s): W. Kaegi Terms Offered: Autumn

Equivalent Course(s): ANCM 34606, NEHC 20510, HIST 32002, HIST 22002

#### NEHC 30568. Balkan Folklore. 100 Units.

This course is an overview of Balkan folklore from ethnographic, anthropological, historical/political, and performative perspectives. We become acquainted with folk tales, lyric and epic songs, music, and dance. The work of Milman Parry and Albert Lord, who developed their theory of oral composition through work among epic singers in the Balkans, helps us understand folk tradition as a dynamic process. We also consider the function of different folklore genres in the imagining and maintenance of community and the socialization of the individual. We also experience this living tradition first hand through our visit to the classes and rehearsals of the Chicago-based ensemble "Balkanske igre."

Instructor(s): A. Ilieva Terms Offered: Winter

Equivalent Course(s): SOSL 26800,CMLT 23301,CMLT 33301,NEHC 20568,SOSL 36800

#### NEHC 30573. The Burden of History: A Nation and Its Lost Paradise. 100 Units.

This course begins by defining the nation both historically and conceptually, with attention to Romantic nationalism and its flourishing in Southeastern Europe. We then look at the narrative of original wholeness, loss, and redemption through which Balkan countries retell their Ottoman past. With the help of Freud's analysis of masochistic desire and Žižek's theory of the subject as constituted by trauma, we contemplate the national fixation on the trauma of loss and the dynamic between victimhood and sublimity. The figure of the Janissary highlights the significance of the other in the definition of the self. Some possible texts are Petar Njegoš's *Mountain Wreath*; Ismail Kadare's *The Castle*; and Anton Donchev's *Time of Parting*.

Instructor(s): A. Ilieva Terms Offered: Winter

Equivalent Course(s): SOSL 27300,CMLT 23401,CMLT 33401,NEHC 20573,SOSL 37300

### NEHC 30605. Colloquium: Sources for the Study of Islamic History. 100 Units.

This course is designed to acquaint the student with the basic problems and concepts as well as the sources and methodology for the study of pre-modern Islamic history. Sources will be read in English translation and the tools acquired will be applied to specific research projects to be submitted as term papers.

Instructor(s): J. Woods Terms Offered: Spring

Equivalent Course(s): NEHC 20605, HIST 36005, HIST 26005

#### NEHC 30645. History of the Fatimid Caliphate. 100 Units.

Instructor(s): P. Walker Terms Offered: Spring

Equivalent Course(s): HIST 24401, HIST 34401, NEHC 20645

### NEHC 30687. Colloquium: Persian Historical Texts. Units.

This course will focus on the study and utilization of narrative, normative and archival sources in Persian. Texts of the major Iranian historians and biographers will be subjected to close readings and analysis. The scripts, protocols, and formula used by Irano-Isalamic chancelleries will also be introduced and the form and content of published an unpublished archival documents will be transcribed and examined in their institutional context. Knowledge of Persian required.

Instructor(s): J. Woods Terms Offered: Spring Prerequisite(s): Knowledge of Persian required Equivalent Course(s): HIST 59000, CMES 30687

## NEHC 30852-30853. Seminar: Ottoman World/Suleyman I-II.

This two-quarter seminar focuses on the transformation of the Muslim Ottoman principality into an imperial entity--after the conquest of Constantinople in 1453-that laid claim to inheritance of Alexandrine, Roman/Byzantine, Mongol/Chinggisid, and Islamic models of Old World Empire at the dawn of the early modern era. Special attention is paid to the transformation of Ottoman imperialism in the reign of Sultan Süleyman the Lawgiver (1520-1566), who appeared to give the Empire its "classical" form. Topics include: the Mongol legacy; the reformulation of the relationship between political and religious institutions; mysticism and the creation of divine kingship; Muslim-Christian competition (with special reference to Spain and Italy) and the formation of early modernity; the articulation of bureaucratized hierarchy; and comparison of Muslim Ottoman, Iranian Safavid, and Christian European imperialisms. The first quarter comprises a chronological overview of major themes in Ottoman history, 1300-1600; the second quarter is divided between the examination of particular themes in comparative perspective (for example, the dissolution and recreation of religious institutions in Islamdom and Christendom) and student presentations of research for the seminar paper. In addition to seminar papers, students will be required to give an oral presentation on a designated primary or secondary source in the course of the seminar.

#### NEHC 30852. Seminar: Ottoman World/Suleyman I. 100 Units.

Instructor(s): C. Fleischer Terms Offered: Autumn

Prerequisite(s): Upper level undergrads with consent only; reading knowledge

of at least 1 European Language recommended

Equivalent Course(s): HIST 78201

#### NEHC 30853. Seminar: Ottoman World/Suleyman II. 100 Units.

Instructor(s): C. Fleischer Terms Offered: Winter

Prerequisite(s): NEHC 30852 Equivalent Course(s): HIST 78202

#### NEHC 30853. Seminar: Ottoman World/Suleyman II. 100 Units.

Instructor(s): C. Fleischer Terms Offered: Winter

Prerequisite(s): NEHC 30852 Equivalent Course(s): HIST 78202

## NEHC 30885. Returning the Gaze: The Balkans and Western Europe. 100 Units.

This course investigates the complex relationship between South East European self-representations and the imagined Western "gaze" for whose benefit the nations stage their quest for identity and their aspirations for recognition. We also think about differing models of masculinity, the figure of the gypsy as a metaphor for the national self in relation to the West, and the myths Balkans tell about themselves. We conclude by considering the role that the imperative to belong to Western Europe played in the Yugoslav wars of succession. Some possible texts/films are Ivo Andric, *Bosnian Chronicle*; Aleko Konstantinov, *Baj Ganyo*; Emir Kusturica, *Underground*; and Milcho Manchevski, *Before the Rain*.

Instructor(s): A. Ilieva Terms Offered: Autumn

Equivalent Course(s): SOSL 27200,CMLT 23201,CMLT 33201,NEHC 20885,SOSL 37200

#### NEHC 30891-30892. Seminar: Introduction to the Ottoman Press I-II.

This is a 2-quarter research seminar. Part 1 may be taken independently. Course introduces students to the historical context and specific characteristics of the mass printed press (newspapers, cultural and political journals, etc.) in the Ottoman Empire in the 19th C. We will investigate issues such as content, censorship, production, readership and distribution through secondary reading and the examination of period publications.

#### NEHC 30891. Seminar: Introduction to the Ottoman Press I. 100 Units.

Instructor(s): A. Shissler Terms Offered: Winter

Prerequisite(s): Knowledge of a relevant research language, (Ottoman Turkish,

Armenian, Greek, Arabic, Ladino, French...) required.

Note(s): Open to undergraduates by permission.

#### NEHC 30892. Seminar: Introduction to the Ottoman Press II. 100 Units.

Instructor(s): A. Shissler Terms Offered: Spring

Prerequisite(s): NEHC 30891. Knowledge of a relevant research language, (Ottoman Turkish, Armenian, Greek, Arabic, Ladino, French...) required.

Note(s): Open to undergraduates by permission.

#### NEHC 30892. Seminar: Introduction to the Ottoman Press II. 100 Units.

Instructor(s): A. Shissler Terms Offered: Spring

Prerequisite(s): NEHC 30891. Knowledge of a relevant research language, (Ottoman Turkish, Armenian, Greek, Arabic, Ladino, French...) required.

Note(s): Open to undergraduates by permission.

## NEHC 30996. History of Israeli-Arab Conflict. 100 Units.

This lecture course traces the development of the Arab-Israeli conflict from its nineteenth-century origins to the present day. It examines the social and ideological roots of Zionism and Palestinan Arab nationalism, the growth of Arab-Jewish hostility in Palestine during the late Ottoman and British mandate periods, the involvement of the Arab states and the great powers, the series of Arab-Israeli wars, the two intifadas, and the zigzag progress towards negotiated agreements between Israel and the Arab states and between Israel and the Palestinians.

Instructor(s): B. Wasserstein Terms Offered: Autumn

Equivalent Course(s): HIST 25902,HIST 35902,INRE 36000,INST 25902,JWSG 35902,NEHC 20996

### NEHC 39850. Islamic Classics and the Printing Press. 100 Units.

This course examines the movement of editing and printing classical Islamic texts that swept across the Muslim world in the early 20th century and established what we now consider the classical canon of Islamic thought. By reading editors' introductions, biographies, and newspaper and journal articles, we investigate who the editors were, why they chose to edit specific texts, and what they perceived as the goals of their work. Through an analysis of the agendas pursued by different groups of editors, we explore early modern debates among Muslim scholars regarding reform, revival, Orientalism, and the classical Islamic heritage.

Instructor(s): A. El-Shamsy Terms Offered: Autumn Prerequisite(s): 2 years of Arabic or the equivalent

## NEHC 39860. Reason and Revelation in Islamic Thought. 100 Units.

This course engages with medieval Muslim discussions regarding the relationship between the universal human faculty of reason and the revealed information provided by prophets. What is the precise nature of each of these potential sources of knowledge? How do they relate to one another? What if they disagree? Primary texts read in class include works of theology, legal theory, and philosophy by authors such as al-Khattabi (d. 998), Ibn Sina (d. 1037), al-Ghazali (d. 1111), Ibn Rushd (d. 1198), Ibn al-Nafis (d. 1288), and Ibn Taymiyya (d. 1328).

Instructor(s): A. El-Shamsy Terms Offered: Spring Prerequisite(s): 3 years of Arabic or the equivalent

#### NEHC 40583. Ottoman Diplomatics and Paleography. 100 Units.

NEHC 40583 Readings in a variety of document types from the fifteenth and sixteenth centuries.

Instructor(s): C. Fleischer Terms Offered: Spring

Prerequisite(s): Two years of modern Turkish and one year of Ottoman Turkish, or equivalent.

Equivalent Course(s): HIST 58300

#### NEHC 49900. Reading and Research. 100 Units.

Instructor(s): STAFF Terms Offered: Autumn, Winter, Spring

Note(s): Select section from faculty list

# NEAR EASTERN LANGUAGES & CIVILIZATIONS - NEAR EASTERN LANGUAGES COURSES

#### NELG 30325. Introduction to Old South Arabian. 100 Units.

This course is an introduction to the languages of the inscriptional material found in western South Arabia, todays Yemen. The inscriptions date from roughly the 8th century BCE to the 6th century CE and are written in four closely related languages, Sabaic, Minaic, Qatabanic, and Hadramitic. In this class we will read material from all major periods and languages of attestation.

Instructor(s): R. Hasselbach Terms Offered: Autumn

#### NELG 49900. Reading and Research. 100 Units.

Instructor(s): STAFF Terms Offered: Autumn, Winter, Spring

Note(s): Select section from faculty list

## NEAR EASTERN LANGUAGES & CIVILIZATIONS - PERSIAN COURSES

#### PERS 30220. Poetics/Politics of Modern Iran, 100 Units.

This course is intended for those students who have learned Persian well enough to start enjoying Persian poetry in the original language. Starting from the Constitutional Revolution of 1906, each session a new poem (if not more) by a new poet will be discussed against the socio-political background of the time. The poets will include some women poets also, and the poems range in form, style and subject matter from traditional to modern, from satirical to prison poems and issues of human/women's rights. The students are expected to prepare for each session, participate actively in discussions, be ready for short presentations based on the assigned secondary literature, and write an essay. Primary texts are read and recited in Persian; secondary readings, discussions, and papers are in English.

Instructor(s): S. Ghahremani Terms Offered: Spring

Prerequisite(s): Knowledge of Persian and consent of instructor

#### PERS 30327. Sa'di and His Imitators. 100 Units.

Instructor(s): F. Lewis Terms Offered: Winter

#### PERS 49900. Reading and Research. 100 Units.

Instructor(s): STAFF Terms Offered: Autumn, Winter, Spring

Note(s): Select section from faculty list

# NEAR EASTERN LANGUAGES & CIVILIZATIONS - SUMERIAN COURSES

### SUMR 49900. Reading and Research. 100 Units.

Instructor(s): STAFF Terms Offered: Autumn, Winter, Spring

Note(s): Select section from faculty list

## Near Eastern Languages & Civilizations - Turkish Courses

#### TURK 30101-30102-30103. Advanced Turkish I-II-III.

The objectives of the course are to develop advanced language skills in Modern Turkish through reading, writing, listening, and speaking, with special emphasis on the proper usage of vocabulary and idiomatic expressions, and to continue the study of Turkish literature and texts begun in the second year. This course is conducted entirely in Turkish. The course is designed to bring the advanced student to a professional level of proficiency. Students are expected to produce advanced level writing in Turkish.

#### TURK 30101. Advanced Turkish I. 100 Units.

Instructor(s): Staff Terms Offered: Autumn Prerequisite(s): TURK 20103 or Consent

#### TURK 30102. Advanced Turkish II. 100 Units.

Instructor(s): H. Anetshofer Terms Offered: Winter

Prerequisite(s): TURK 30101

## TURK 30103. Advanced Turkish III. 100 Units.

Instructor(s): Staff Terms Offered: Spring

Prerequisite(s): TURK 30102

#### TURK 30102. Advanced Turkish II. 100 Units.

Instructor(s): H. Anetshofer Terms Offered: Winter

Prerequisite(s): TURK 30101

## TURK 30103. Advanced Turkish III. 100 Units.

Instructor(s): Staff Terms Offered: Spring

Prerequisite(s): TURK 30102

#### TURK 30111-30112. Readings in Advanced Turkish I-II.

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. This course is conducted in Turkish. Every meeting consists of three parts. In the first hour we work on our conversation skills: We either talk about general subjects or debate a topic for which the students prepared in advance. In the second hour we work on a text which was translated as homework. We watch sections of a Turkish film in the third hour. I distribute a script of the part we are going to watch with blanks and the students fill in the blanks while watching the film.

#### TURK 30111. Readings in Advanced Turkish I. 100 Units.

Instructor(s): STAFF Terms Offered: Autumn Prerequisite(s): TURK 20103 or equivalent

Note(s): Open to Undergraduates with Consent of Instructor

## TURK 30112. Readings in Advanced Turkish II. 100 Units.

Instructor(s): K. Arik Terms Offered: Winter Prerequisite(s): TURK 30111 or equivalent.

Note(s): Open to Undergraduates with Consent of Instructor

## TURK 30112. Readings in Advanced Turkish II. 100 Units.

Instructor(s): K. Arik Terms Offered: Winter Prerequisite(s): TURK 30111 or equivalent.

Note(s): Open to Undergraduates with Consent of Instructor

## TURK 40586. Advanced Ottoman Readings I. 100 Units.

Instructor(s): H. Karateke Terms Offered: Winter

Prerequisite(s): TURK 30503 or equivalent

Note(s): Open to qualified undergraduate students

NEAR EASTERN LANGUAGES & CIVILIZATIONS - UZBEK COURSES



## DEPARTMENT OF PHILOSOPHY

#### Chair

• Candace Vogler

Director of Graduate Studies

Michael Kremer

Professors

- Daniel Brudney
- Ted Cohen
- Iames Conant
- Arnold Ira Davidson
- Michael Kremer
- Gabriel Richardson Lear
- Jonathan Lear, Social Thought
- Martha C. Nussbaum, Law
- Robert Pippin, Social Thought
- Robert J. Richards, History
- · Josef J. Stern
- Candace A. Vogler

**Associate Professors** 

- Jason Bridges
- Kevin Davey (Director of Undergraduate Studies)
- David Finkelstein

**Assistant Professors** 

- · Agnes Callard
- · Anton Ford
- Ben Laurence
- Marko Malink
- Raoul Moati
- Anat Schechtman
- Anubay Vasudevan
- Malte Willer

**Emeritus Faculty** 

- · Howard Stein
- William W. Tait
- William C. Wimsatt

Full-time Lecturer and Philosophy/MAPH Coordinator

Benjamin Callard

Full-time Lecturer

#### Bart Schultz

The programs in philosophy are designed to develop skill in philosophical analysis, to enable the student to think clearly, systematically, and independently on philosophical issues, and to achieve a thorough acquaintance with major classics and contemporary works in philosophy. Philosophy classes are conducted so that students may develop philosophical skills by class discussions and by the writing of carefully directed papers.

The following is an outline of the main features of the graduate program. For full details, please write the Department of Philosophy directly.

## GRADUATE DEGREES

The graduate program in philosophy is primarily a doctoral program. Admission as a graduate student normally implies that, in the opinion of the department, the student is a promising candidate for the Ph.D. degree. The Master of Arts degree, however, may be awarded to students in the program who desire it and who meet the requirements specified below.

## THE DEGREE OF MASTER OF ARTS

The Philosophy Department does not admit students directly into an M.A. program. Master's degrees are awarded only to students who are enrolled in a Ph.D. program at the University of Chicago. These can be either:

- Doctoral students in another discipline who seek a "secondary" M.A. in Philosophy, in conjunction with their doctoral studies in that other discipline; or
- Doctoral students in Philosophy who want an M.A.

The requirements for the degree are the same in either case. The requirements can be satisfied entirely by course-work; no thesis is required. They are specified in five clauses:

- Quality: No course for which the student received a grade lower than a B+ will satisfy any requirement for the M.A.
- Level: Only courses taken at the graduate level (that is, with a course-number of 30000 or higher) can satisfy any requirement for the M.A.
- Quantity: The student must complete at least eight courses in Philosophy at the University of Chicago. (Reading and research courses do not count toward satisfying this requirement, nor do courses taken pass/fail—except the first-year seminar, which counts as one course if passed.)
- Distribution: The student must have taken at least one designated course in each
  of the Philosophy Department's five "areas" namely:
  - Area I: Value theory
  - Area II: Philosophy of science, philosophy of language, and logic
  - Area III: Epistemology and metaphysics
  - Area IV: Ancient or Medieval philosophy
  - Area V: Modern philosophy (17th-19th centuries)

Elementary Logic: The student must demonstrate competence in elementary
logic. This can be achieved by an interview in which the candidate satisfies one
of the Department's logicians that he or she has the required competence, or by
taking the Elementary Logic course (PHIL 30000 Elementary Logic), or any more
advanced logic course offered by the Department. Philosophy 30000 can count as
one of the minimum eight courses, but it does not satisfy the Area II requirement.
A more advanced logic class does both.

## Application Procedure

Doctoral Students in the Department of Philosophy may apply for the M.A. at any time after they have completed the requirements. 1. Contact the Department Coordinator so that the proper paperwork is submitted verifying your courses (above) and 2. contact the office of the Humanities Dean of Students in order to gain access to the degree application in http://my.uchicago.edu. Keep your expected graduation date set to the date you anticipate receiving the Ph.D.

Students in a Ph.D. program at the University of Chicago in a department other than Philosophy who wish to receive a "secondary" M.A. in Philosophy must first apply for admission to the M.A. program in the department of Philosophy. No student can apply unless she has taken at least three Philosophy courses, and it is expected that the student will apply soon after completing that number of courses. To initiate the application process, the student should set up an appointment with the Assistant Dean of Students for Admissions in the Division of Humanities who will direct the student through the required paperwork and obtain:

- The applicant's transcript of courses taken for the B.A.
- His/Her GRE scores
- A transcript of the applicant's courses at the University of Chicago taken up to the time of the application.
- A sample of her best philosophical writing. This may but need not be a paper written for one of the applicant's already completed Philosophy courses at the University.
- A brief letter from the chair or director of graduate studies of the applicant's home department supporting the application. The letter should explain why the student is seeking an M.A. in philosophy to complement her doctoral studies.
- Names of two faculty in the Dept. of Philosophy who can comment on work done by the applicant and on her philosophical potential.
- A statement by the applicant that explains why she is seeking an M.A. in Philosophy.

## THE DEGREE OF DOCTOR OF PHILOSOPHY

The divisional and University requirements for the Ph.D. degree must be fulfilled. Departmental requirements are as follows:

## COURSE REQUIREMENTS

The Course Requirement has seven parts concerning:

The number of required courses

- The distribution of required courses
- The logic requirement
- · Required progress
- Policies concerning incompletes
- Grades
- · Transfer credits

## NUMBER OF REQUIRED COURSES

Students must complete at least thirteen courses in their first two years of study: the first year seminar and twelve graduate courses.

First-year students must enroll in the first-year seminar. The exact organization and scheduling varies from year to year according to the instructor's discretion. It is graded on a pass-fail basis.

In addition, twelve graduate courses must be completed with a grade of B or better:

- At least ten of these courses must be in the Philosophy Department listings;
- · Reading and research courses do not count among these twelve classes
- At least one must be a graduate seminar in Philosophy

#### DISTRIBUTION OF REQUIRED COURSES

Students are required to take one course in each of the following three areas of contemporary philosophy:

- Value theory (listed in the course descriptions as I)
- Philosophy of science, philosophy of language, and logic (listed in the course descriptions as II)
- Epistemology and metaphysics (listed in the course descriptions as III) and three courses on the history of philosophy as follows:
- A figure or movement in either Ancient or Medieval Philosophy (listed in the course descriptions as IV)
- A figure or movement in Modern Philosophy from the 17th through 19th centuries (listed in the course descriptions as V)
- One additional course on a figure or movement in either IV or V.

It should be noted that not all graduate courses satisfy a field distribution requirement; those not classified in the published course descriptions as belonging to I-V cannot be used to satisfy the distribution requirement. Nor can Philosophy 30000 (Elementary Logic) be used to satisfy a field distribution requirement.

## LOGIC REQUIREMENT

There is a requirement in logic that can be satisfied in several ways.

By passing PHIL 30000 Elementary Logic with a grade of B or higher.
 Philosophy 30000 is offered every Autumn quarter. It counts toward the twelve course requirement but does not satisfy the field II distribution requirement.

- By passing a course equivalent to or better than Philosophy 30000 (Elementary Logic), at another institution or in another department at Chicago, with a grade of B+ or higher. The equivalence of the course in question to Philosophy 30000 will be determined by the instructor in Philosophy 30000 in the year in question, on the basis of an interview with the student, and such evidence as the syllabus for the course, the textbook for the course, and any other course materials which the student can provide. Note that satisfying the logic requirement in this way will count neither towards one of the twelve required courses nor towards satisfying the field II distribution requirement.
- By passing an advanced graduate course in logic with a grade of B or higher.
   Passing an advanced graduate course in logic would both satisfy the logic requirement and count towards the field II distribution requirement.

#### REQUIRED PROGRESS

Courses must be completed, with a grade of B or better, according to the following timetable.

- Two courses should be completed by the beginning of the Winter quarter of the first year
- Four courses (at least three in the Philosophy Department) should be completed by the beginning of the third quarter
- Six courses should be completed by 30 September of the second year
- Ten courses should be completed by the end of the fifth quarter
- All thirteen courses (twelve plus the first year seminar) must be completed by 30 September following the sixth quarter.

In addition to this timetable, students should keep in mind that because they are expected to be working on their Preliminary Essay over the summer following their sixth quarter, they would be ill-advised not to have completed their course requirements by the early part of the summer.

#### **INCOMPLETES**

At the discretion of the instructor, coursework not completed on time may be regarded as an "incomplete." This means that the instructor will permit a student to complete the work for a course after the normal deadline.

The instructor sets the time period for completion of the incomplete, subject to the following limitation: all coursework must be submitted by September 30th following the quarter in which the course was taken in order to count toward fulfillment of the requirements for the M.A. and Ph.D. This date is an absolute deadline and is not subject to further extensions by individual faculty members.

Note: Students in their first year in the program are not permitted to take any incompletes in their first quarter.

#### **GRADES**

Satisfactory grades for work toward the Ph.D. in Philosophy are A, A-, B+, and B.

For Philosophy faculty, those grades mean the following. A: pass with distinction; A: high pass; B+: pass; B: low pass.

#### TRANSFER CREDITS

The following policy applies to the Philosophy Ph.D. program. Special requirements of joint programs take precedence over this policy.

- 1. Of the required 12 graduate courses, no more than 2 can be taken at the University, but outside the Philosophy Department.
- 2. Of the required 12 graduate courses, no more than 3 can be transferred from other institutions.
- 3. Of the required 12 graduate courses, at least 9 must be taken within the Philosophy Department's course offerings.
- 4. Only courses taken while enrolled in a doctoral program in Philosophy can be counted towards the required 12 graduate courses.

For example, a student might transfer 2 courses from another institution and take one course from another department within the University, with the remaining 9 courses taken within the Philosophy Department. Or a student might transfer 3 courses from another institution, with the remaining 9 courses taken within the Philosophy Department. Students wishing to obtain credit for graduate courses taken from the listings of other departments within the University toward the required 12 course do not need to petition the department, within the two-course limit specified above. Students wishing to obtain transfer credit for courses taken at other institutions must petition the Graduate Program Committee. Students should be prepared to provide evidence in support of their transfer application at the request of the Committee. Such evidence may include course descriptions, syllabi, assignments, written work completed for the course, and so on. Students who are transferring from other graduate programs must make such a request upon their entry into the Philosophy Department. Students who take a course at another institution while enrolled in the PhD program should consult with the Director of Graduate Studies beforehand, but must still petition the Graduate Program Committee to have the course accepted for transfer credit upon completion of the course.

Note that elementary logic courses taken outside the department may fulfill the elementary logic requirement but may not be used to meet the 12 course requirement. See "Logic Requirement" above for further details.

#### FOREIGN LANGUAGE EXAM

All students must pass an examination in French, German, Latin, or Greek by the end of Spring quarter of the fourth year or before the topical examination, whichever comes first. (There is a special rule for students who wish to write theses on ancient Greek or Roman philosophy; this is detailed below).

There are two kinds of language examinations: those administered by the Department and those administered by the University. Departmental language exams will be given twice a year and may not be taken more than twice.

Students who take the University language examination must receive a "High Pass." These are offered every quarter and there is a fee for taking them.

There is a special requirement for those working in ancient philosophy or German philosophy, since work in these fields depends heavily on one's ability to use the relevant languages.

Any student intending to write a thesis on ancient philosophy must pass the Departmental or University exam in Greek (the latter with a "High Pass"). Any student intending to write a thesis on Hellenistic or Roman philosophy must also pass the Departmental or University exam in Latin (the latter with a "High Pass"). Any student intending to write a thesis on German philosophy must pass the Departmental or University exam in German with a "High Pass".

Such students may take the Departmental exam in Greek or Latin or German a maximum of three times (as opposed to two times, which is the rule for other languages).

#### Preliminary Essay

In the Spring quarter of their second year students will register for the first quarter of a two-quarter (Spring, Autumn) workshop on the preliminary essay. The workshop involves discussion of general issues in writing the essay and student presentations of their work. Although students do not register for the Summer quarter, they are expected to make significant progress on their preliminary essay over the summer.

By the end of the eighth week of the Spring quarter at the latest each student will submit to the Director of Graduate Studies a proposed topic and a ranked list of possible readers in the Philosophy Department. The Graduate Program Committee will evaluate proposed topics along the following lines:

- Is the topic philosophically interesting?
- Can a paper on the topic be completed within the given time?
- Can a committee be formed to supervise an essay on the topic?

If the topic is approved, the Graduate Program Committee will form a preliminary essay committee for the student in question consisting of two faculty readers, each of whom the student is expected to consult regularly and each of whom have equal responsibility in directing the preliminary essay. The student's primary responsibility in this process is regularly to provide each of the faculty readers with a new draft of the essay and then rewrite the most recent draft in accordance with their instructions. The primary responsibility of the faculty readers is to provide the student with prompt and focused instructions about how to rewrite each draft, while ensuring that it remain within the page-length requirement. The preliminary essay should be no longer than 8,000 words in the body of the text, with an additional 1000 words pf philosophical prose permitted in the footnotes. The word-count does not include bibliographical and philological footnotes or block quotations in the text.

In addition to the supervision furnished by the student's preliminary essay committee, further direction and structure is provided through participation in the

Preliminary Essay Seminar, which runs for two quarters. Every student enrolled in the PhD program is required to take the Preliminary Essay Seminar for credit during the Spring Quarter of their second year and the Fall Quarter of their third year. The seminar is taught by the Director of Graduate Studies, who offers additional supervision and oversight throughout the entire preliminary essay process, from beginning to end. One of the primary purposes of the Preliminary Essay Seminar is to provide a forum in which students can present their ongoing work on the essay in a seminar-environment, in order to discuss it with their peers and receive additional oral feedback on their work.

From the point of view of the faculty, the aim of the exercise of the preliminary essay is to enable the student to acquire the following two skills before embarking upon a full-scale dissertation: (1) to learn to improve a piece of philosophical prose by subjecting it to many rounds of revision, without in the process permitting it to grow in length, and (2) to learn to work with a committee of faculty advisors whose distinct forms of supervision are to be synthesized and harmonized in that single piece of writing. From the point of view of the student, the exercise of the preliminary essay affords the following two opportunities: (1) to test out a possible dissertation topic, without having immediately to make a costly investment of time and effort in it, and (2) to test out a pair of possible dissertation advisors, without immediately having to commit to these individuals as final choices for members of the student's dissertation committee. If, after completing the preliminary essay, a student wishes to change (one or more of) their faculty advisors or their topic or both, then they are utterly free to do so.

The final draft of the Preliminary Essay must be submitted by the first day of the Winter quarter of the student's third year. Essays submitted late are penalized as follows: A letter grade is reduced by one notch if the essay is submitted after the deadline but before the first day of the sixth week of the Winter quarter (e.g. an 'A' is reduced to an 'A-'). A letter grade is reduced by two notches if the essay is submitted after the first day of the sixth week of the Winter quarter but by the end of Exam Week of the Winter quarter (e.g. an 'A' is reduced to a B+). Essays submitted after the end of the Winter quarter do not count toward satisfaction of the requirement.

#### TOPICAL EXAMINATION

Following the Preliminary Essay, students begin work toward their dissertations. During the Winter and Spring quarters of their third year, they should be meeting with various faculty members to discuss and refine possible dissertation topics, and possible dissertation committees.

By the end of the seventh week of the spring quarter, each student should meet with a prospective committee for an informal "dissertation chat," based on a "dissertation sketch" submitted to those faculty and to the Graduate Program Committee. The character of that sketch will vary from case to case; but, in any case, is not expected to be long or elaborate. Some sketches may be more definitive than others; some may be seriously disjunctive; some students may submit more than one sketch. The point of the sketch and preliminary meetings is to provide some faculty guidance for the more independent research that begins over the summer. After the

"dissertation chat" the student should submit to their committee a document that describes the work toward formulating a dissertation project and lays out a plan of research for the summer that will lead to a Topical by the beginning of the Winter quarter of their fourth year.

At the beginning of the following fall (fourth year), students will again meet with their advisors (optimally all together), to discuss progress and developments over the summer, and make concrete plans for the Dissertation Topical (to be held later that quarter, or, if necessary, early in the Winter quarter). Those plans will include a tentative timetable, a determination of the dissertation committee, and the expected character of the materials to be submitted by the student, and on which the exam/ discussion will be based. Though the details will vary (depending on the subject matter, the state of the research, individual work habits, and so on), these materials must include a substantial piece of new written work by the student (something on the order of twenty-five double-spaced pages)-perhaps a draft of a chapter, an exposition of a central argument, a detailed abstract (or outline) of the whole dissertation, or whatever the committee as a whole agrees upon. (It is expected that students will abide by these agreements; but, if there are unanticipated problems, they may petition their advisors and the DGS, in writing, for a revision). The Topical Exam is an oral exam administered by the members of a student's dissertation committee with the aim of evaluating the viability of the proposed dissertation project and the student's ability to complete it within a reasonable amount of time. Students will be admitted to candidacy for the Ph.D., only once they have officially passed their Topical Exam.

Note: students must have scheduled their Topical Examination by the end of their fifteenth quarter (normally the end of the fifth year) to remain in the Program. (For students admitted before 2010: students must have scheduled their Topical Examination by the end of their sixth year to remain in the Program.)

Students cannot take their topical until they have met all other program requirements including passing their foreign language exam or exams. Students must finish their language exams by the end of their fourth year in the program (independently of their status with regard to any other requirements)

The Department requires that each student submit a written progress report on his or her progress by the end of the winter quarter of each year, beginning with his or her fourth year in the program. The report should be submitted to the Director of Graduate Studies and (after the Topical) to the student's dissertation committee. Beginning in Winter 2013: In addition to this report, students who have advanced to candidacy must submit a substantial piece of new writing (25-30 pages in length) to the chair of their dissertation committee. The student will be notified whether or not he or she is making good progress following the annual review meetings in Spring.

It is very much in each student's own interest to be well along with his or her dissertation early in the fifth year, for several related reasons. First, of course, students on fellowships are obligated to teach a stand-alone course that year, which is inevitably time and energy consuming. Second, typically the fellowship support ends at the end of that year; and some students will not get any more financial support from the University. And, finally, dissertation year fellowships are awarded

to those applicants whose work is not only of the best quality, but also the furthest along (as documented not only by faculty testimonials but also by submitted chapters). Keep in mind that so-called "dissertation-year fellowships" are awarded competitively on a Division-wide basis. Though Philosophy students have often done well in this competition, there is no guarantee that the application will be successful.

To be sure, supporting oneself without financial aid, while finishing up a dissertation, is a time-honored academic tradition. But, for most students, the available fellowships are far from deluxe (either inside or outside the University), and it is clearly wise to minimize one's dependence on them, if possible.

NOTE: The Department Coordinator must be informed of the date and time of your Topical Exam. This is so that department and university can record the exam and admit the student to candidacy. Students need to email to the Department Coordinator the names of the members of the committee, the sample chapter on which the Topical examination is based, and the working title of the dissertation.

## TEACHING REQUIREMENTS

The Philosophy Department views the development of teaching competence as an integral part of its overall Ph.D. program and takes various steps to train its doctoral students to become excellent teachers of philosophy. The first teaching opportunities come in the form of course assistantships. The professor responsible for the course in which a doctoral student serves as an assistant is also responsible for monitoring the doctoral student's teaching progress in that course and preparing a written report of her teaching performance therein. Once a doctoral student has proven herself as a teaching assistant, she is permitted to do stand-alone teaching. In these cases, too, however, the design of the syllabus of the course is developed in consultation with a member of the faculty. Here, too, that faculty member is responsible for further monitoring the doctoral student's teaching progress over the duration of the stand-alone course and preparing a written report of her teaching performance as a solo instructor.

The initial guaranteed funding for five years awarded to students admitted to the program includes a teaching obligation. That obligation standardly takes the form of the student serving four times as an instructor -- usually three times as a course assistant and once as an instructor of a stand-alone course. Normally, students complete one teaching assistantship in their third year, after completion of the Preliminary Essay, and two in their fourth year. Normally, students give their stand-alone course in the fifth year. These first four teaching stints are not further compensated: they are a component of the five-year fellowship package. This four-time teaching obligation is a requirement of the Department of Philosophy's Ph.D. program.

These first four teaching opportunities are built into the basic requirements of the Ph.D. program in order to ensure that students in the program acquire a certain minimum degree of teaching competence. However, the Department views the teaching obligation as a bare minimum with regard to teaching preparation.

Doctoral students in the program are encouraged to do more teaching in the later years.

The Department's primary responsibility with respect to doctoral students is to support their work toward the doctoral degree. Teaching preparation is a crucial aspect of that responsibility and any additional teaching must be consistent with timely progress toward the doctoral degree. Accordingly, the policy on teaching beyond the departmental teaching obligation is as follows:

- 1. In Years 1 & 2, when doctoral students are expected to satisfy their course and logic requirements as well as to formulate topics, find readers, and begin research toward their Preliminary Essays, doctoral students are not given departmental teaching and will not be permitted to accept extra-departmental teaching. The students may, however, complete the Training Course for Writing Interns and Lectors offered by the University of Chicago Writing Program before Autumn of Year 3.
- 2. In Years 3-5, students may petition the DGS for permission to apply for extra teaching. If, and only if, the following conditions are met, the Department (normally through the DGS) may petition the Dean of Students in the Humanities and the Master of the Humanities Collegiate Division to allow the student to apply for extra-departmental teaching:
  - A. The student is making exemplary progress toward the degree in Philosophy (that is, the student has met every deadline set in the time to degree expectations and the students' work toward the degree is strong).
  - B. There is a sound pedagogic reason to allow the student to seek extra teaching.
- 3. Students must make their petitions to the DGS by the second week of the term prior to the term in which they hope for extra-GAI teaching—students must make their petitions by the second week of Spring quarter for extra teaching in Autumn, by the second week of Autumn quarter for extra teaching in Winter, and by the second week in Winter quarter for extra teaching in Spring. The Department must make its petition to the DOS and Master of the HCD by the end of the third week of the term prior to the term in which students seek extra-GAI teaching.
- 4. If the DOS and the HCD approve the Department's petition, and if the students are offered extra teaching appointments, funding for these positions cannot be drawn from the students' fellowship teaching obligation monies.
- 5. Extra teaching permissions may be withdrawn if students cease to make exemplary progress toward their degrees.

Petitions to the DOS and Master of the HCD will attest to the students' progress and provide the rationale for allowing these students to seek teaching beyond the departmental teaching obligation.

Students do not need departmental permission to seek extra teaching assignments after their fifth year of residence.

Over the course of a doctoral student's career, that student together with the Department builds a teaching dossier, containing the syllabuses of the courses

that she has taught, written reports by faculty teaching mentors on those courses, and last but not least, undergraduate evaluations of those courses. When doctoral students prepare to go on the job market, the Department sees to it that one member of the faculty undertakes the responsibility of writing a teaching letter for the student that documents and surveys the highlights of her teaching career at the University of Chicago.

## DISSERTATION AND FINAL ORAL EXAM

Students must inform their committee members of their intention to schedule a defense during the term PRIOR to the term in which they plan to defend. Committee members will consult concerning whether the dissertation is in sufficiently final form to warrant the fixing of a date for the oral examination. Committee members will normally have seen the bulk of the work of the dissertation before making this judgment. Students should consult with their Dissertation Director and other Committee members about the amount of material they will need to see, the state of completion needed, and the time required for this judgment to be made. When the Dissertation Committee judges that the student is ready to defend, the student must coordinate with the Dissertation Committee and the Department Co-ordinator to settle the date and time for the dissertation.

Students should consult with their Committee concerning a precise deadline for submission of the final draft of the dissertation for the defense. This is normally several weeks to a month before the defense date. Students should be aware that, in practice, in order to graduate in a given quarter, the final draft of the dissertation must be submitted to the Dissertation Committee in the first week or two of that quarter, so that the defense can take place prior to the Library's deadline for submitting the final form of the dissertation, leaving time for any necessary revisions noted during the defense. For information regarding the precise deadline by which your approved dissertation must be submitted in a given quarter for the degree to be granted in that same quarter, please click here (http://www.lib.uchicago.edu/e/phd/deadlines.html). Note also that an exam cannot be scheduled for at least two weeks after the formal request has been submitted.

The defense must take place at the University of Chicago, preferably in the Autumn, Winter, or Spring quarters. Summer defenses are scheduled at the discretion of the student's Dissertation Committee.

The student and at least one member of the Dissertation Committee must be physically present at the defense.

The student should submit, within the timeline notes, to the Department Coordinator:

- the scheduled date, time, and the members of the committee, and any special room requirements, at least 3 weeks prior, or as soon as the date and time are settled
- an electronic copy (.doc or .docx) of a 1-2 paragraph abstract, at least 3 weeks prior
- an electronic copy of a 10-page abstract of the dissertation, *at least 2 weeks prior* The final oral exam is a public event. The examining committee consists of the members of the dissertation committee, along with an appointed member of the Humanities Division faculty who serves as a representative of the Dean's Office.

Other faculty and graduate students from the Philosophy Department may and generally do attend. Family members of the doctoral candidate and other members of the general public are also welcome.

If a student passes, then it is customary in the final phase of the exam for the members of the student's dissertation committee to request a final round of revisions to the dissertation. The final granting of the degree is conditional upon the completion of these final revisions. These are to be made promptly after the exam and prior to the formal submission of the PhD document. After the dissertation is submitted, the student is required to provide each member of the dissertation committee with an electronic version of the document in its final form.

#### PHILOSOPHY COURSES

### PHIL 30000. Elementary Logic. 100 Units.

An introduction to the techniques of modern symbolic logic. The focus will be on the syntax and semantics of classical propositional and first-order quantificational logic. The course will introduce methods for determining whether a given argument is valid or invalid. We will discuss how statements and arguments of ordinary discourse can be represented within the formal language of propositional and quantificational logic. There will also be discussion of some important metatheorems for these logical systems. (B) (II)

Instructor(s): M. Malink Terms Offered: Autumn

Note(s): Course not for field credit.

Equivalent Course(s): PHIL 20100, CHSS 33500, HIPS 20700

#### PHIL 30120. Wittgenstein's "Philosophical Investigations" 100 Units.

A close reading of *Philosophical Investigations*. Topics include: meaning, justification, rule following, inference, sensation, intentionality, and the nature of philosophy. Supplementary readings will be drawn from *Remarks on the Foundations of Mathematics* and other later writings. (B) (III)

Instructor(s): J. Bridges Terms Offered: Spring

Prerequisite(s): At leas one previous courses in the Philosophy Department required; Philosophical Perspectives does not qualify. Equivalent Course(s): FNDL 20120, PHIL 20120

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## PHIL 30506. Philosophy of History: Narrative and Explanation. 100 Units.

This lecture-discussion course will trace different theories of explanation in history from the nineteenth century to the present. We will examine the ideas of Humboldt, Ranke, Dilthey, Collingwood, Braudel, Hempel, Danto, and White. The considerations will encompass such topics as the nature of the past such that one can explain its features, the role of laws in historical explanation, the use of *Verstehen* history as a science, the character of narrative explanation, the structure of historical versus other kinds of explanation, and the function of the footnote. (B) (II)

Instructor(s): R. Richards Terms Offered: Autumn

Equivalent Course(s): HIST 35110,PHIL 20506,CHSS 35110,HIST 25110

## PHIL 30610. Goethe: Literature, Science, Philosophy. 100 Units.

This lecture-discussion course will examine Johann Wolfgang von Goethe's intellectual development, from the time he wrote *Sorrows of Young Werther* through the final states of *Faust*. Along the way, we will read a selection of Goethe's plays, poetry, and travel literature. We will also examine his scientific work, especially his theory of color and his morphological theories. On the philosophical side, we will discuss Goethe's coming to terms with Kant (especially the latter's third Critique) and his adoption of Schelling's transcendental idealism. The theme uniting the exploration of the various works of Goethe will be unity of the artistic and scientific understanding of nature, especially as he exemplified that unity in "the eternal feminine."

Instructor(s): R. Richards Terms Offered: Winter

Note(s): German is not required, but helpful.

Equivalent Course(s): HIPS 26701, CHSS 31202, PHIL 20610, GRMN 25304, GRMN

35304,FNDL 23511,HIST 25304

#### PHIL 31009. Aesthetics. 100 Units.

This course introduces problems in the philosophy of art with both traditional and contemporary texts. Topics include the definition of art, representation, expression, metaphor, and taste. Autumn. (A)

Instructor(s): T. Cohen Terms Offered: Autumn

Prerequisite(s): Consent of instructor. Equivalent Course(s): PHIL 21009

#### PHIL 31210. Philosophy and Literature. 100 Units.

This course is a reading of works by a variety of contemporary authors who deal with the question of whether, and how, fiction and philosophy are related to one another. (A)

Instructor(s): T. Cohen Terms Offered: Autumn

Equivalent Course(s): PHIL 21210

### PHIL 31225. Critique of Humanism. 100 Units.

This course will provide a rapid-fire survey of the philosophical sources of contemporary literary and critical theory. We will begin with a brief discussion of the sort of humanism at issue in the critique—accounts of human life and thought that treat the individual human being as the primary unit for work in the humanities and the humanistic social sciences. This kind of humanism is at the core of contemporary common sense. It is, to that extent, indispensable in our understanding of how to move around in the world and get along with one another. That is why we will conduct critique, rather than plain criticism, in this course: in critique, one remains indebted to the system under critical scrutiny, even while working to understand its failings and limitations. Our tour of thought produced in the service of critique will involve work by Hegel, Marx, Gramsci, Freud, Fanon, Lacan, and Althusser. We will conclude with a couple of pieces of recent work that draws from these sources. The aim of the course is to provide students with an opportunity to engage with some extraordinarily influential work that continues to inform humanistic inquiry.

Instructor(s): C. Vogler Terms Offered: Spring

Equivalent Course(s): PHIL 21225, ENGL 12002, ENGL 34407

### PHIL 31402. Unhappiness. 100 Units.

"Nothing is funnier than unhappiness" says Nelly in Beckett's *Endgame*. We shall seek to distinguish between unhappiness, as the subject of poetic works, from unhappiness as it is understood by philosophy, which, I would argue, is precisely as funny as nothing. We shall discuss some famous unhappy families. A Greek tragedy (Sophocles: *Oedipus Tyrannus*), a Renaissance tragedy (Shakespeare, *Hamlet*), a modern theater of the absurd (Beckett: *Endgame*).

Instructor(s): I. Kimhi Terms Offered: Spring

Equivalent Course(s): PHIL 21402,SCTH 25703,SCTH 35703

#### PHIL 31414. MAPH Core Course: Contemporary Analytic Philosophy. 100 Units.

A survey of some of the central concerns in various areas of philosophy, pursued from the perspective of the analytic tradition. In epistemology, our topics will include the definition of knowledge, the challenge of skepticism, and the nature of justification. In the philosophy of mind, we will explore the mind-body problem and the nature and structure of intentional states. In the philosophy of language, we will address theories of truth and of speech acts, the sense/reference distinction, and the semantics of names and descriptions. In ethics, we will focus on the debate between utilitarians and Kantians.

Instructor(s): B. Callard Terms Offered: Autumn

Prerequisite(s): This course is open only to MAPH students. MAPH students who wish to apply to Ph.D. programs in philosophy are strongly urged to take this course.

# PHIL 31425. Karl Marx's Theory of History. 100 Units.

This course will investigate the theory of human history developed by Marx and Engels—Historical Materialism, as it came to be known. Though we will primarily focus on texts by Marx and Engels, we will begin by considering some of Hegel's writing on history, and we will end by looking at different attempts to explain, apply, and develop the theory within the Marxian tradition.

Instructor(s): A. Ford Terms Offered: Spring Equivalent Course(s): FNDL 21504,PHIL 21425

# PHIL 31511. Forms of Philosophical Skepticism. 100 Units.

The aim of the course will be to consider some of the most influential treatments of skepticism in the post-war analytic philosophical tradition—in relation both to the broader history of philosophy and to current tendencies in contemporary analytic philosophy. The first part of the course will begin by distinguishing two broad varieties of skepticism—Cartesian and Kantian—and their evolution over the past two centuries (students without any prior familiarity with both Descartes and Kant will be at a significant disadvantage here), and will go on to isolate and explore some of the most significant variants of each of these varieties in recent analytic philosophy. The second part of the course will involve a close look at recent influential analytic treatments of skepticism. It will also involve a brief look at various versions of contextualism with regard to epistemological claims. We will carefully read and critically evaluate writings on skepticism by the following authors: J. L. Austin, Robert Brandom, Stanley Cavell, Thompson Clarke, Saul Kripke, C. I. Lewis, John McDowell, H. H. Price, Hilary Putnam, Barry Stroud, Charles Travis, Michael Williams, and Ludwig Wittgenstein.

Instructor(s): J. Conant Terms Offered: Spring

Prerequisite(s): This will be an advanced lecture course open to graduate students and undergraduates with a prior background in analytic philosophy. Equivalent Course(s): PHIL 21511

# PHIL 31600. Human Rights I: Philosophical Foundations of Human Rights. 100 Units.

Human rights are claims of justice that hold merely in virtue of our shared humanity. In this course we will explore philosophical theories of this elementary and crucial form of justice. Among topics to be considered are the role that dignity and humanity play in grounding such rights, their relation to political and economic institutions, and the distinction between duties of justice and claims of charity or humanitarian aid. Finally we will consider the application of such theories to concrete, problematic and pressing problems, such as global poverty, torture and genocide. (V) (I)

Instructor(s): Staff Terms Offered: Spring

Equivalent Course(s): HMRT 20100,HMRT 30100,PHIL 21700,HIST 29301,HIST 39301,INRE 31600,LAWS 41200,MAPH 40000,LLSO 25100

## PHIL 32001. Pragmatism and Philosophy of Science of C.S. Peirce. 100 Units.

In this seminar will examine the views of the American pragmatist philosopher C.S. Peirce as they pertain to the nature and methodology of science. The course will be organized around a careful reading of the six essays comprising the series "Illustrations of the Logic of Science," published by Peirce in *Popular Science Monthly* in the years 1877-78. Among the many topics addressed in these essays are: (1). What is the aim of scientific inquiry? (2). What are the conditions for the meaningfulness of a scientific hypothesis? (3). What is the role of probability in science (inverse inference vs. hypothesis testing)? (4). Are there natural laws? (5). What are the grounds for inductive inference? (6) How are we to classify the various sciences? In addition to the six essays mentioned above, we will also consider some of Peirce's later writings on the subject as well as contemporary interpretations of the Peircean view. (II)

Instructor(s): A. Vasudevan Terms Offered: Autumn

# PHIL 33305. History of Aesthetics. 100 Units.

Readings from Plato, Aristotle, Hume, Kant, Nietzsche, and Collingwood among others. (A) (II)

Instructor(s): T. Cohen Terms Offered: Winter

Equivalent Course(s): PHIL 23305

# PHIL 33410. Heidegger's "Being and Time" 100 Units.

(B) (III)

Instructor(s): R. Pippin Terms Offered: Spring Equivalent Course(s): FNDL 27903,PHIL 23410

# PHIL 33411. Being, Time, and Otherness: A Reading of Time and Other and Existence and Existents. 100 Units.

his course will be devoted to two early Essays of Levinas, *Time and Other* and *Existence and Existents*. We will try to situate these two works in the context of the French reception of German Existentialism. The major goal of this course will be to show that the concept of Otherness in Levinas's philosophy does not entail a simple abandonment of the Heideggerian "ontological difference" but lies in a new deduction of it that entails a new concept of Time, beyond its ontological (and Heideggerian) meaning. We will try to explain how this new deduction of the ontological difference is based on the elucidation of phenomenological events that remain hidden to the so-called "phenomenological reduction" and that requires a reform of the phenomenological method that Levinas inherits from Husserl and Heidegger. Thanks to this new method, Phenomenology can be accomplished as an investigation that is able to go beyond intentional objects.

Instructor(s): R. Moati Terms Offered: Autumn

Equivalent Course(s): PHIL 23411

# PHIL 34001. Partial Information in the Theory of Meaning. 100 Units.

Language is for imparting information, but it is equally a tool for communicating ignorance. This course aims to do three things: (i) introduce some of the more well-known ways that what we say depends upon uncertain or incomplete information, (ii) survey some basic tools for representing uncertainty and show how they can fit into a general semantic theory, and (iii) push the boundaries on aims (i) and (ii). Instructor(s): T. Gillies Terms Offered: Spring

Equivalent Course(s): PHIL 24001

### PHIL 35110. Maimonides and Hume on Religion. 100 Units.

This course will study in alternation chapters from Maimonides' Guide of the Perplexed and David Hume's Dialogues concerning Natural Religion, two major philosophical works whose literary forms are at least as important as their contents. Topics will include human knowledge of the existence and nature of God, anthropomorphism and idolatry, religious language, and the problem of evil. Time permitting, we shall also read other short works by these two authors on related themes. (IV or V))

Instructor(s): J. Stern Terms Offered: Autumn

Equivalent Course(s): PHIL 25110, JWSC 26100, RLST 25110, HIJD 35200

# PHIL 35112. Philosophy, Talmudic Culture, and Religious Experience: Soloveitchik. 100 Units.

Joseph Soloveitchik was one of the most important philosophers of religion of the twentieth century. Firmly rooted in the tradition of Biblical and Talmudic texts and culture, Soloveitchik elaborated a phenomenology of Jewish self-consciousness and religious experience that has significant implications for the philosophy of religion more generally. This course will consist of a study of some of his major books and essays. Topics to be covered may include the nature of Halakhic man and Soloveitchik's philosophical anthropology, the problem of faith in the modern world, questions of suffering, finitude, and human emotions, the nature of prayer, the idea of cleaving to God. Soloveitchik will be studied both from within the Jewish tradition and in the context of the classical questions of the philosophy of religion. Some previous familiarity with his thought is recommended. (I)

Instructor(s): A. Davidson Terms Offered: Winter

Equivalent Course(s): PHIL 25112, DVPR 35112, HIJD 35112, RLST 25112

#### PHIL 37303. The Early Modern Mind. 100 Units.

This course will study topics in philosophy of mind in the writings of various figures from the early modern period. Topics to be discussed may include: theories of ideas, representation, consciousness, and affects (or passions). (V)

Instructor(s): A. Schechtman Terms Offered: Spring

Equivalent Course(s): PHIL 26006

## PHIL 37500. Kant's "Critique of Pure Reason" 100 Units.

This course will be devoted to an intensive study of selected portions of Kant's Critique of Pure Reason. The focus of the course will be on the Transcendental Analytic and especially the Transcendental Deduction. We will begin, however, with a brief tour of some of the central claims of the Transcendental Aesthetic. Some effort will be made to situate these portions of the first half of the Critique with respect to the later portions of the book, viz. the Transcendental Dialectic and the Doctrine of Method. Although the focus of the course will be on Kant's text, some consideration will be given to some of the available competing interpretations of the book. The primary commentators whose work will thus figure briefly in the course in this regard are Lucy Allais, Henry Allison, Stephen Engstrom, Johannes Haag, Robert Hanna, Martin Heidegger, Dieter Henrich, John McDowell, Charles Parsons, Sebastian Roedl, Wilfrid Sellars, Peter Strawson, and Manley Thompson. Our interest in these commentators in this course will always only be as a useful foil for understanding Kant's text. No separate systematic study will be attempted of the work of any of these commentators. Of particular interest to us will be topics like Kant's criticisms of traditional empiricism, the distinction between sensibility and understanding, and his account of the relation between intuitions and concepts. The aim of the course is both to use certain central texts of recent Kant commentary and contemporary analytic Kantian philosophy to illuminate some of the central aspirations of Kant's theoretical philosophy and to use certain central Kantian texts in which those aspirations were first pursued to illuminate some recent developments in epistemology and the philosophy of mind. (B) (V) Instructor(s): J. Conant Terms Offered: Winter

Equivalent Course(s): PHIL 27500

# PHIL 37600. The Problem of Logically Alien Thought and Its Aftermath. 100 Units.

In what sense, if any, do the laws of logic express necessary truths? The course will consider four fateful junctures in the history of philosophy at which this question received influential treatment: (1) Descartes on the creation of the eternal truths, (2) Kant's re-conception of the nature of logic and introduction of the distinction between pure general and transcendental logic, (3) Frege's rejection of the possibility of logical aliens, and (4) Wittgenstein's early and later responses to Frege. We will closely read short selections from Descartes, Kant, Frege, and Wittgenstein, and ponder their significance for contemporary philosophical reflection by studying some classic pieces of secondary literature on these figures, along with related pieces of philosophical writing by Jocelyn Benoist, Matt Boyle, Cora Diamond, Peter Geach, John MacFarlane, Adrian Moore, Hilary Putnam, Thomas Ricketts, Sebastian Rödl, Richard Rorty, Peter Sullivan, Barry Stroud, Clinton Tolley, and Charles Travis. Instructor(s): J. Conant Terms Offered: Autumn

Note(s): The course is open to advanced undergraduates and graduate students with prior background in philosophy.

Equivalent Course(s): PHIL 27600

# PHIL 39400. Intermediate Logic. 100 Units.

In this course, we will prove the soundness and completeness of standard deductive systems for both sentential and first-order logic. We will also establish related results in elementary model theory, such as the compactness theorem for first-order logic, the Löwenheim-Skolem theorem, and Lindström's theorem. (B) (II)

Instructor(s): A. Vasudevan Terms Offered: Winter

Equivalent Course(s): CHSS 33600, HIPS 20500, PHIL 29400

# PHIL 39406. Algebraic Logic and Its Critics: The History of Logic from Leibniz to Frege. 100 Units.

The study of logic in the second half of the 19th century was dominated by an algebraic approach to the subject. This tradition, as exemplified in George Boole's Laws of Thought, aimed to develop a calculus of deductive reasoning based on the standard algebraic techniques employed in mathematics. In this course, we will trace the historical development of the algebraic tradition in logic, beginning with the early attempts of Leibniz to formulate a calculus ratiocinator. We will consider the various systems of algebraic logic developed in the 19th century in the works of De Morgan, Boole, Jevons, Peirce, and Schroder, and conclude by examining Frege's critique of Boole's system in relation to Frege's own Begriffsschrift. (B) (II, V) Instructor(s): M. Malink, A. Vasudevan Terms Offered: Spring

Equivalent Course(s): PHIL 29406

#### PHIL 41205. Virtue. 100 Units.

What kind of characteristic is virtue? In addressing this question, we will first consider Aristotle's account of virtue. Then we will read some work by neo-Aristotelian "virtue ethicists" including Geach, Anscombe, Foot, Hursthouse, MacIntyre, Vogler, and Thompson. (I)

Instructor(s): A. Ford Terms Offered: Autumn

#### PHIL 43110. Reasons. 100 Units.

In this seminar we will address questions about the nature of reasons and normativity, with a particular eye toward the difficulties philosophy has encountered in attempting to locate our responsiveness to normativity in the casual order. Readings will be drawn from a manuscript in progress as well as a range of work in philosophy of mind and philosophy of action, skewing toward contemporary sources. (III)

Instructor(s): J. Bridges Terms Offered: Autumn

#### PHIL 49700. Preliminary Essay Workshop. 100 Units.

A two-quarter (Spring, Autumn) workshop on the preliminary essay required for all doctoral students in the Spring of their second year and the Autumn of their third year. The workshop involves discussion of general issues in writing the essay and student presentations of their work. Although students do not register for the Summer quarter, they are expected to make significant progress on their preliminary essay over the summer.

Instructor(s): M. Kremer Terms Offered: Spring, Autumn

Prerequisite(s): All and only philosophy graduate students in the relevant years.

## PHIL 49900. Reading & Research. 100 Units.

Instructor(s): Staff Terms Offered: Autumn, Winter, Spring

# PHIL 50008. Michel Foucault: Self, Government, and Regimes of Truth. 100 Units.

A close reading of Michel Foucault's 1979-80 course at the Collège de France, *Du gouvernement des vivants*. Foucault's most extensive course on early Christianity, these lectures examine the relations between the government of the self and regimes of truth through a detailed analysis of Christian penitential practices, with special attention to the practices of *exomologēsis* and *exagoreusis*. We will read this course both taking into account Foucault's sustained interest in ancient thought and with a focus on the more general historical and theoretical conclusions that can be drawn from his analyses. (I)

Instructor(s): A. Davidson Terms Offered: Autumn

Prerequisite(s): Limited enrollment; Students interested in taking for credit should attend first seminar before registering. Reading knowledge of French required. Consent Only.

Equivalent Course(s): CMLT 50008, DVPR 50008

#### PHIL 50100. First-year Seminar. 100 Units.

This course meets in Autumn and Winter guarters.

Instructor(s): J. Bridges Terms Offered: Autumn, Winter

Prerequisite(s): Enrollment limited to first-year graduate students.

# PHIL 50250. Greek Tragedy and Philosophy. 100 Units.

Ancient Greek tragedy has been of continuous interest to philosophers, whether they love it or hate it. But they do not agree about what it is and does, or about what insights it offers. This seminar will study the tragic festivals and a select number of tragedies, also consulting some modern studies of ancient tragedy. Then we shall turn to philosophical accounts of the tragic genre, including Plato, Aristotle, the Greek and Roman Stoics, Seneca, Lessing, Schlegel, Hegel, Schopenhauer, Nietzsche, Iris Murdoch, and Bernard Williams. If we have time we will include some study of ancient Greek comedy and its philosophical significance.

Instructor(s): M. Nussbaum Terms Offered: Autumn

Prerequisite(s): Admission by permission of the instructor. Permission must be sought in writing by September 15. An undergraduate major in philosophy or some equivalent solid philosophy preparation, OR a solid grounding in Classics, including language training. In other words, those who qualify on the basis of philosophical background do not have to know ancient Greek, but someone without such preparation may be admitted on the basis of knowledge of Greek and other Classics training of the sort typical of our Ph.D. students in Classics. An extra section will be held for those who can read some of the materials in Greek.

# PHIL 50601. Hegel's Science of Logic. 100 Units.

Hegel's chief theoretical work is called The Science of Logic. An abridged version is the first part of the various versions of his Encyclopedia of the Philosophical Sciences. We shall read and discuss representative passages from both versions, and attempt to understand Hegel's theory of concepts, judgment, and inference, and the place or role of such an account in his overall philosophical position. Several contemporary interpretations of these issues will also be considered. (V) Instructor(s): R. Pippin Terms Offered: Winter

Prerequisite(s): Prior work in Kant's theoretical philosophy is a prerequisite. Equivalent Course(s): SCTH 50601

# PHIL 51200. Law-Philosophy Workshop: Life and Death. 100 Units.

This is a seminar/workshop many of whose participants are faculty from various related disciplines. It admits approximately ten students. Its aim is to study, each year, a topic that arises in both philosophy and the law and to ask how bringing the two fields together may yield mutual illumination. Most sessions are led by visiting speakers, from either outside institutions or our own faculty, who circulate their papers in advance. The session consists of a brief introduction by the speaker, followed by initial questioning by the two faculty coordinators, followed by general discussion, in which students are given priority. Several sessions involve students only, and are led by the instructors. Students write a 20-25 page seminar paper at the end of the year. The course satisfies the Law School Substantial Writing Requirement. There are approximately four meetings in each of the three quarters. Students must therefore enroll for all three quarters.

Instructor(s): M. Nussbaum Terms Offered: Autumn, WInter, Spring Prerequisite(s): Students are admitted by permission of the two instructors. They should submit a c.v. and a statement (reasons for interest in the course, relevant background in law and/or philosophy) to the instructors by e-mail. Usual participants include graduate students in philosophy, political science, and divinity, and law students.

Note(s): Students must enroll for all three quarters.

Equivalent Course(s): LAWS 61512, RETH 51301, GNSE 50101, HMRT 51301

#### PHIL 51303. Acting and Thinking. 100 Units.

An action, according to Aristotle, can be a logical conclusion of thinking. We shall try to understand this claim by reading book 7 of *Nicomachean Ethics* (we shall discuss Aristotle on practical syllogism, the weakness of the will, the difference between practical and theoretical). We shall proceed to consider the place of these ideas in Kant's *First and Second Critique*. We shall look at commentaries on the relevant texts by E. Anscombe, J. Dancy, S. Engstrom, J. McDowell, A.W. Price, S. Rodl, and others.

Instructor(s): I. Kimhi

Equivalent Course(s): SCTH 51114

#### PHIL 51415. I-Thou and the Subject of Psychoanalysis. 100 Units.

An attempt to locate psychoanalytic theory and practice within the philosophical and religious contexts of "I-Thou" relationships. Readings from psychoanalytic thinking on the nature of the psychoanalytic relationship (for example, Loewald, Stone, Freud, Lacan) as well as contemporary philosophical work on second-person relations (Michael Thompson, Sebastian Rödl, Stephen Darwall), and on certain Jewish philosophers (Rosenzweig, Levinas).

Instructor(s): J. Lear, M. Stone. Terms Offered: Spring

#### PHIL 51820. The Idea of Political Liberalism. 100 Units.

John Rawls's book *Political Liberalism* stakes out a remarkably original way to conceive of the goals and possibilities of political philosophy. In addition, in *Political Liberalism* Rawls offers an account of distributive justice that fits with his new conception of the discipline's goals and possibilities. In the seminar we will (i) lay out and assess Rawls's argument justifying his turn to political liberalism; (ii) lay out and assess the new version of Rawls's theory of justice as fairness; (iii) lay out and assess at least one other political liberal view of proper distributive principles; (iv) examine how choosing between competing accounts of distributive principles is supposed to proceed in light of the constraints of political liberalism; and (v) determine whether and how far those constraints should be loosened. Instructor(s): D. Brudney Terms Offered: Autumn

#### PHIL 51830. Topics in Moral, Political and Legal Philosophy. 100 Units.

The topic will be an examination of philosophical and empirical issues raised by Nietzsche's moral psychology, including his account of the will, motivation, the sources of moral judgment, and related topics. We will look at both at selections from Nietzsche's texts, as well as pertinent secondary literature on Nietzsche, and recent work in philosophy and psychology.

Instructor(s): M. Forster, B. Leiter Terms Offered: Winter

Prerequisite(s): Ph.D. students may register without instructor consent. All others by instructor permission only.

Equivalent Course(s): LAWS 78603

# PHIL 53300. Philosophy of Language Seminar: Quotations, Pictures, Words. 100 Units

his seminar will examine one of the primary devices by means of which we talk about language ad mental content. Topics will include the varieties of quotation: direct, indirect, mixed, pure, and non-literal (scare-quotes); various current theories of direct and indirect quotation; the relation between quotation and meaning; context-sensitivity and quotation; and the pictorial character of quotation. More generally, the seminar will investigate quotation as a phenomenon on the border between semantics and pragmatics and between linguistic and non-linguistic modes of representation. Readings will be drawn from authors such as Frege, Quine, Tarski, Davidson, Bennett, Cappelen and Lepore, H. Clark, Recanti, Garcia-Carpintero, Geurts, C. Potts, Kaplan, T. Parsons, Predelli, Burge Peacocke, Brandom, Reimer, Richard, Saka, Sperber and Wilson, and Washington. (II)

Instructor(s): J. Stern Terms Offered: Winter Equivalent Course(s): LING 53300,DVPR 53302

suggested by Slote.

# PHIL 53306. Language and Self-Consciousness. 100 Units.

Instructor(s): D. Finkelstein Terms Offered: Spring

PHIL 54005. Moral Sentimentalism and Its Psychological Foundations. 100 Units. In his *Moral Sentimentalism*, Michael Slote provides an account of the moral judgment that gives a prominent place to the evaluative feeling of empathy as the natural sources of human morality. But rather than embracing an emotivist account of this judgment, his claim is that this judgment is true or false in very much the same way as descriptive judgments are and that all the shortcomings of emotivism can be avoided. As for his account of empathy, he relies on social psychological research on empathic feelings. In this course, we shall take our starting point from a critical account of Slote's theory and of the social psychological foundations on which he claims to build it. We shall then turn to Adam Smith's *Theory of Moral Sentiments* where we find an earlier version of moral sentimentalism, one which claims a virtue theoretical heritage in a much more convincing way than the version

PHIL 54805. The Concept of Metaphysics: Heidegger, Levinas, Derrida. 100 Units. This course will be devoted to the confrontation of two of the most important masterpieces of Continental Philosophy: Being and Time of Heidegger and Totality and Infinity of Levinas. In this course we shall try first to focus on the Heideggerian project of a "deconstruction of the metaphysics of presence". Against Heidegger, Levinas maintains that ontology cannot be fundamental—the question of being at the core of Heidegger's project cannot just be directed to one's own tacit understanding of being. If the question of being is an actual question, its addressee must be an Other. Levinas teaches that metaphysical experience of otherness cannot be captured in Heideggerian fundamental ontology. Nevertheless, Derrida in "Violence and Metaphysics" challenges Levinas's idea of a Metaphysical Experience that could be entirely free of Ontology and Phenomenality (in the Heidegger's senses of these terms). Against Levinas he defends the the idea that the Other cannot be identified to a Metaphysical Presence (as it is for Levinas) but necessarily coincides with an Absence and a Trace. We will try to identify and to criticize such a reduction of the Levinas' Metaphysics to the so-called "Metaphysics of Presence" identified and deconstructed by Heidegger and Derrida. Through the analysis of the philosophical conflicts between Heidegger, Levinas and Derrida about metaphysics, the fundamental goal of this course will be to defend a sense for Metaphysics after the so-called "End of Metaphysics."

Instructor(s): R. Moati Terms Offered: Autumn

### PHIL 55510. Knowing How. 100 Units.

In "Knowing How and Knowing That" (1945) and The Concept of Mind (1951), Gilbert Ryle famously argued for a sharp distinction between practical and propositional knowledge. This distinction was settled philosophical orthodoxy for several decades, but has more recently come under attack, beginning with J. Stanley and T. Williamson's "Knowing How" (2001). Responses to their arguments have spawned a rich literature, from such authors as S. Schiffer, A. Noe, P. Snowdon, A.W. Moore, I. Rumfitt, K. Setiya, J. Hornsby, and many others, leading up to Stanley's recent book Know How (2011). This course will delve into this literature, beginning with a careful reading of Ryle, briefly considering early responses to his arguments, and then turning to a discussion of Stanley and Williamson, their allies, and their critics. (III)

Instructor(s): M. Kremer Terms Offered: Winter

# PHIL 55799. Aristotle's Theory of Science: Posterior Analytics I. 100 Units.

In the *Posterior Analytics*, Aristotle presents his theory of science and knowledge (episteme). For Aristotle, scientific knowledge is typically obtained by means of demonstrations. A demonstration is a kind of deduction that proceeds from epistemically prior premisses and provides an explanation (aition) of why the conclusion is true. Aristotle examines the nature of demonstrative sciences by using the theory of syllogistic deduction developed in the *Prior Analytics*. For example, he argues that there can be no infinite chains of predication and hence no infinite regress of demonstrations. Thus, every chain of demonstrations terminates in unproved first principles (archai). The seminar will be a close reading of the first book of the Posterior Analytics, covering central aspects of Aristotle's logic, philosophy of science, and epistemology. (II, III, IV)

Note(s): Knowledge of Greek not required.

### PHIL 55911. Aristotle's Politics. 100 Units.

A close reading of this important work of ethical and political theory. Among the topics we will discuss: the relation between the individual and the political community; the relation between private associations and the public, political community; civic virtue; the role of the political community in moral development; slaves and other marginal members of the political community; and the possibility of virtue and happiness in degenerate regimes. (IV) Instructor(s): G. Lear Terms Offered: Spring

# PHIL 57605. Layer-Cake vs. Transformative Conceptions of Human Mindedness. 100 Units.

The Layer-Cake Assumption has many philosophical guises. In its guise as a thesis about the nature of our cognitive faculties and their relation to one another, it goes like this: The natures of our sentient and rational cognitive capacities respectively are such that we could possess one of these capacities, as a form of cognition of objects, without possessing the other. The underlying assumption is that at least one of these capacities is a self-standing cognitive capacity – one which could operate just as it presently does in us in isolation of the other. Beginning with Kant, it became important to certain philosophers to show that the Assumption forms a common ground of philosophical views thought to be fundamentally opposed to one another - such as Empiricism and Rationalism. The Empiricist Variant of this guise of the Assumption might be put as follows: Our nature as sensibly receptive beings, in so far as it makes a contribution to cognition, represents a self-standingly intelligible aspect of our nature. The Rationalist Variant enters such a claim on behalf of the self-standingly intelligible character of our intellectual capacities. In particular areas of philosophy – such as epistemology, metaphysics, the philosophy of mind, the philosophy of action, and the philosophy of self-knowledge - each of these variants assumes a more determinate guise, while continuing to hold the fundamental assumption in place. Our first concern will be to isolate, compare, and contrast the various guises of this assumption and their manner of operation both across the history of philosophy and across different areas of contemporary philosophy. Our second concern will be to consider what it would be to reject the assumption in question and what the philosophical consequences of doing so are. Our third concern will be to explore the views of a number of different authors who do seek to reject it and to assess which of these attempts, if any, are philosophically satisfactory. Readings will be from Elizabeth Anscombe, Aristotle, Matthew Boyle, Robert Brandom, Gareth Evans, David Finkelstein, Anton Ford, Christopher Frey, Immanuel Kant, Andrea Kern, Chris Korsgaard, C. I. Lewis, John McDowell, Richard Moran, Sebastian Roedl, Moritz Schlick, Wilfrid Sellars, David Velleman, and Ludwig Wittgenstein, among others.

Instructor(s): J. Conant Terms Offered: Autumn

### PHIL 59950. Workshop: Job Placement Seminar. 100 Units.

Course begins in late Spring quarter and continues in the Autumn quarter.

Instructor(s): G. Lear Terms Offered: Spring, Autumn

Prerequisite(s): This workshop is open only to PhD Philosophy graduate students planning to go on the job market in the fall of 2012. Approval of dissertation committee is required.

Note(s): Pass/Fail.



# DEPARTMENT OF ROMANCE LANGUAGES AND LITERATURES

#### Chair

• Emilio Kourí

#### **Professors**

- Arnold Davidson
- Frederick A. de Armas
- Philippe Desan
- Emilio Kourí
- · Armando Maggi
- Robert J. Morrissey
- David Nirenberg
- Larry F. Norman
- Thomas Pavel
- Anne Robertson
- Mauricio Tenorio
- · Rebecca West
- Rebecca Zorach

#### **Associate Professors**

- Daisy Delogu
- Daniel Desormeaux
- · Alison James
- Agnes Lugo-Ortiz
- Mario Santana
- Justin Steinberg

#### **Assistant Professors**

- Miguel Martínez
- Alfredo César Melo
- Rocco Rubini

#### **Senior Lecturers**

- Nadine Di Vito
- Claude Grangier
- Ana María Fiuza Lima
- María C. Lozada
- Janet Sedlar
- Veronica Vegna

#### Lecturers

- Marie Berg
- Céline Bordeaux
- Irena Cajkova
- · Izas Indacoechea
- Alice McLean
- Mar Rosàs Tosas
- Lidwina Van den Hout-Huijben

### **Emeritus Faculty**

- · Paolo Cherchi
- René de Costa
- · Peter F. Dembowski
- George Haley
- · James Lawler
- · Elissa Weaver

#### Staff

- Elizabeth Cronin, Department Assistant
- Jennifer Hurtarte, Department Coordinator

### Program

The Department of Romance Languages and Literatures offers graduate programs leading to a Ph.D. in French and Francophone Literatures (http://rll.uchicago.edu/content/doctoral-program-french-and-francophone-literature), Hispanic and Luzo-Brazilian Studies (http://rll.uchicago.edu/content/doctoral-program-hispanic-and-luso-brazilian-studies), and Italian Studies (http://rll.uchicago.edu/content/doctoral-program-italian-studies), as well as in Renaissance and Early Modern Studies (REMS) (http://rll.uchicago.edu/graduate/rems-phd-requirements). These programs include the study of literary history, established and current critical methodologies, literary theory and analysis, the sociology of literature, literature and history, cultural studies, film, and foreign language acquisition and pedagogy.

The Department has developed a unique program of theoretical and practical teacher training in Romance languages and literatures. All Ph.D. students are funded with fellowships that allow them to gain teaching experience in the undergraduate language program - first as language assistants, then as autonomous lecturers. This system allows for a high degree of professional training and competitive funding, without distracting students from their graduate studies.

The Department admits applicants only for the Ph.D. degree, and does not offer a terminal M.A. program. Admitted students without a master's degree may receive an M.A. after their first year of study in the French, Italian, or Hispanic and Luzo-Brazilian program. The REMS program does not admit students without an M.A.

Students in the Department are provided opportunities to broaden their knowledge in a variety of ways. Each language program offers students several programs for study and research abroad, and the Department invites distinguished scholars and writers from the United States and abroad to lecture and to teach.

The France-Chicago Center (http://fcc.uchicago.edu) — a Franco-American research institution dedicated to fostering contact among French and American students, professors, and professionals—organizes and sponsors conferences and colloquia, provides fellowships and travel grants, funds visiting faculty members from France, and organizes lectures. The Fulbright Distinguished Chair in Italian Studies enables the Department to invite a prominent visitor from Italy each year; past visiting professors have included Roberto Antonelli, Laura Barile, Gianni Celati, and Gianpiero Brunetta. Each year, the Edward Larocque Tinker Visiting Professorship in Latin American and Iberian Studies brings prominent scholars and other professionals to the University for research and teaching. We have brought poets, playwrights, novelists, and distinguished critics such as José Miguel Wisnik (Brazil), Jorge Edwards (Chile), Luciano García-Lorenzo (Spain), Javier Lasarte (Venezuela), and Anthony Stanton (México). Romance Languages and Literatures also benefits from faculty collaboration in the Department of Cinema and Media Studies, the committees on the History of Culture, Interdisciplinary Studies in the Humanities, and Social Thought, along with the centers for Gender and Sexuality, Latin American Studies, and Race, Politics and Culture.

Students are also encouraged to participate in and coordinate graduate workshops. Some of the current workshops include Caribbean Studies; Gender and Sexuality Studies; Latin American History; Mass Culture; Medieval Studies; Modern France and the Francophone World; Poetry and Poetics; Renaissance; and Reproduction of Race and Racial Ideologies; among others. The Department features its own workshop on Western Mediterranean Culture.

Upon completion of the Ph.D., students have had great success in finding tenure-track positions at such institutions as Wesleyan University, The University of Pennsylvania, The University of Colorado, The University of Oregon, The State University of New York at Buffalo, Syracuse University, Victoria University of Wellington (New Zealand), and other excellent colleges and universities.

Further details regarding the Department and specific program requirements can be found online at: http://rll.uchicago.edu/.

The application process for admission and financial aid for all graduate programs in Humanities is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online at: http://humanities.uchicago.edu/prospective/admissions.html. Questions pertaining to admission and aid should be directed to humanitiesadmissions@uchicago.edu or (773) 702-1552.

#### ROMANCE LANGUAGES AND LITERATURES - CATALAN COURSES

### CATA 31900. Introduction to Contemporary Catalan Literature. 100 Units.

This course provides a survey of major authors, works, and trends in Catalan literature from the beginning of the twentieth century to the present. We study works representing various literary genres (novel, poetry, short story) and analyze the most important cultural debates of the period.

Instructor(s): M. Rosàs Tosas Terms Offered: Winter Note(s): Knowledge of Catalan highly recommended.

Equivalent Course(s): CATA 21900

# CATA 35013. Theories and Practices of Everyday Life in Catalan Literature and Cinema. 100 Units.

Thanks to the theoretical reflections of some of the great French thinkers of the 1970s (Blanchot, Barthes, Lefebvre, De Certeau, Perec, etc.) and some of the major critics of more recent times (Sheringham, Highmore, Gumbrecht, etc.), one can analyze the concept of the "representations of everyday life" as a central axis of art, carrying out a vast, exhaustive, and systematic exploration of contemporary novel and cinema, among other artistic forms like photography. This course explores some of the major examples of everyday life representations both urban and rural in contemporary Catalan culture through the analysis of some novels, short stories, travel writings, and films. The course favours a historical, inderdisciplinary, and intertextual approach that facilitates interconnected readings of the texts selected for in-depth analysis. In order to enable the students to engage with the texts under study in an informed and scholarly manner, a number of theoretical approaches to everyday life theories will be developed. Special attention will be directed toward relationship between fiction and reality, literature and history, witness and literary reworking, the uses of literary images as historical evidences, Barcelona's literary representation, etc.

Instructor(s): X. Pla Terms Offered: Autumn

Note(s): Texts and films originally published in Catalan will be provided in translation into English or Spanish. Classes will be conducted in Spanish or English. Equivalent Course(s): SPAN 25013, SPAN 35013, CATA 25013

# ROMANCE LANGUAGES AND LITERATURES - FRENCH COURSES

# FREN 31503. Approches à l'analyse littéraire. 100 Units.

This course will focus on the metaliterary production of authors such as Deschamps, Boileau, Verlaine, Breton, Sartre, and Robbe-Grillet in order to see how literature has theorized and reinvented itself across time.

Instructor(s): A. James Terms Offered: Winter

Prerequisite(s): FREN 20500 and one previous literature course taught in French.

Note(s): Taught in French.

Equivalent Course(s): FREN 21503

# FREN 32000. Poésie et Récit au Moyen Âge. 100 Units.

Ce cours examinera les capacités et les possibilités narratives de la poésie du Moyen Âge, ainsi que les rapports entre l'écriture lyrique et le récit. Nous nous concentrerons sur le dit narratif et les textes hybrides.

Instructor(s): D. Delogu Terms Offered: Autumn

Prerequisite(s): FREN 20500 and one previous literature course taught in French.

Note(s): Taught in French.

Equivalent Course(s): FREN 22000

### FREN 32213. Feminist Theory and Counter-Cinema. 100 Units.

Feminism in Great Britain, France, and America has produced a rigorous intellectual, theoretical, and aesthetic legacy within the field of film studies. This course will explore the central debates of feminist psychoanalytic film theory (the patriarchal unconscious; Hollywood narrative; the gaze; genre; visual/female pleasure; masochism; the female spectator; resistant spectators) and criticism as we also integrate the contemporary movement of feminist historiography into our central mode of inquiry. The theoretical debates surrounding the critique of language, the question of feminine writing, cinécriture, and the female author will inform our investigation of the radical aesthetics of feminist counter cinema. Films include: Queen Christina; Orlando; Craig's Wife; Le Bonheur; Vertigo; Hiroshima, Mon Amour; Mahogany; Salome; Fuses; Riddles of the Sphynx; Film About a Woman Who ...; Jeanne Dielman; Tapage Nocturne; Sex is Comedy.# Instructor(s): Jennifer Wild Terms Offered: Winter

Equivalent Course(s): FREN 22213, GNSE 20208, GNSE 30308, CMST 40202

#### FREN 32775. Montaigne: vie privée et vie publique. 100 Units.

La constitution littéraire et philosophique des Essais fut influencée par le souci de Montaigne de réaliser des ambitions et des aspirations politiques. Il faut démythifier l'image d'Épinal qui présente l'essayiste isolé dans sa tour, loin des agitations de son temps, jouant avec sa chatte et s'interrogeant sur la condition humaine. Cette lecture d'un Montaigne public a pour but de mieux comprendre les transformations des Essais sur vingt ans (1572-1592). La gageure est de considérer Montaigne et ses stratégies de publication des Essais - différentes dans le temps - dans le cadre d'une carrière publique (où plutôt de carrières au pluriel) et à la lumière des événements de leur temps qui marquent et influences ses choix. Il ne s'agit pas de coller Montaigne à l'histoire de son temps, mais d'offrir une nouvelle interprétation des Essais et de considérer ce que son livre a pu représenter aux yeux de leur auteur et de ses lecteurs à des moments différents d'une longue carrière publique comme conseiller au parlement de Bordeaux, maire de cette cité et négociateur entre Henri III et Henri de Navarre.

Instructor(s): P. Desan Terms Offered: Winter

Note(s): Taught in French.

Equivalent Course(s): REMS 32775, FNDL 22714, FREN 22775

# FREN 33500. Caribbean Fiction: Self-Understanding and Exoticism. 100 Units.

The Caribbean is often described as enigmatic, uncommon, and supernatural. While foreigners assume that the Caribbean is exotic, this course will explore this assumption from a Caribbean perspective. We will examine the links between Caribbean and Old World imagination, the relationship between exoticism and Caribbean notions of superstition, and the way in which the Caribbean fictional universe derives from a variety of cultural myths.

Instructor(s): D. Desormeaux Terms Offered: Winter

Note(s): The course will be taught in English and all required texts are in English and English translations from French. A weekly session in French will be held for majors and graduate students in French and Comparative Literature.

Equivalent Course(s): CMLT 21801, CMLT 31801, FREN 23500

## FREN 34301. Le Règne des passions au 17e siècle. 100 Units.

This course is a study of the Early Modern vision of human passions, as reflected in literature. We read plays by Shakespeare, Corneille and Racine, narratives by Cervantes, d'Urfé, Saint-Réal, and Mme de La Fayette and maxims by La Rochefoucauld and Pascal.

Instructor(s): T. Pavel Terms Offered: Winter

Prerequisite(s): For undergrad students, third- or fourth-year standing.

Note(s): The course is in French and most required texts are in French.

Equivalent Course(s): FREN 24301, REMS 34301

### FREN 35200. Pour une lecture politique et économique de Rabelais. 100 Units.

Nous aborderons Rabelais dans le cadre politique de la Renaissance. Entre autres thèmes, nous étudierons le déclin des valeurs nobiliaires et la montée de l'idéologie bourgeoise, offrant les premiers fondements de la modernité. Le personnage de Panurge sera au centre de notre lecture du *Pantagruel*, du *Tiers Livre* et du *Quart Livre*. La guerre, le commerce, la religion, le voyage et l'organisation sociale et politique de la société retiendront plus particulièrement notre attention. À travers Rabelais nous étudierons aussi l'imaginaire économique de la Renaissance, notamment les questions de production, consommation, inflation, thésaurisation, etc

Instructor(s): P. Desan Terms Offered: Autumn

Note(s): Taught in French. Undergrads permitted with consent of instructor.

Equivalent Course(s): REMS 35200,FREN 25200

#### FREN 35703. Le Roman et L'Histoire (XIXe-XXe Siecles) 100 Units.

While the nineteenth-century novel has a privileged relationship with history, twentieth-century literature is marked by a double movement of engagement with and detachment from contemporary events. This course will examine this evolution through the study of some key works from the nineteenth century to the present. Themes will include the representation and fictionalization of history, memory and quest, and the transformations of realism. Among the authors studied will be Zola, Duras, Modiano, Nemirovsky, and Djebar.

Instructor(s): A. James Terms Offered: Spring

Note(s): Taught in French.

Equivalent Course(s): FREN 25703

#### FREN 36003. Introduction à l'autobiographie. 100 Units.

This course traces the history of the autobiographical genre in France from the eighteenth century to the present. The study of key texts will be accompanied by an introduction to some critical perspectives. We will give special emphasis to questions of reference and authenticity, identity and subject formation, and gender and the family. Authors include Rousseau, Chateaubriand, Stendhal, Colette, Perec, and Sarraute.

Instructor(s): A. James Terms Offered: Spring

Prerequisite(s): FREN 20500 Note(s): Taught in French.

#### FREN 36103. Les Misérables. 100 Units.

In this course we read *Les Misérables* and discuss the work's message, structure and aesthetic vision. We will be particularly attentive to Victor Hugo's role as an observer of nineteenth-century French society as well as an actor in the political life of his times.

Instructor(s): R. Morrissey Terms Offered: Winter

Note(s): All classes and texts in French; presentations preferred in French, but English will be acceptable depending on the concentration. Written work in French or English.

Equivalent Course(s): FNDL 26100,FREN 26103

# FREN 36600. Anténor Firmin: De l'égalité des races humaines: Anthropologie positive (1885) 100 Units.

Ce séminaire se penche sur la vie intellectuelle d'Anténor Firmin (1850-1911), politicien, anthropologue haïtien du 19e siècle et premier membre de race noire de la prestigieuse Société d'Anthropologie de Paris. Grand théoricien de la race, on le connaît principalement pour sa colossale réponse, *De l'égalité des races*, au célèbre ouvrage, *Essai sur l'inégalité des races humaines*, de celui qu'on appelle désormais «l'inventeur du racisme», Arthur Gobineau. Si l'on en croit le témoignage de l'éminent anthropologue américain Melville Herskovits qui se réclame de sa pensée, Firmin aurait exercé une influence décisive sur le développement de tout un pan de l'anthropologie aux Antilles et aux États-Unis. Ce qui nous intéresse davantage dans le cadre du séminaire, c'est un examen approfondi de son travail de théoricien du postcolonialisme; car il figure parmi les premiers à s'interroger, vers la fin du 19e siècle, avant même le mouvement de la négritude, sur la spécificité possible d'une pensée proprement nègre.

Instructor(s): D. Desormeaux Terms Offered: Autumn

Note(s): Taught in French. Undergrads permitted with consent of instructor.

Equivalent Course(s): FREN 26600

# FREN 36701. Mythical History, Paradigmatic Figures: Caesar, Augustus, Charlemagne, Napoleon. 100 Units.

What is the process by which some historical figures take on mythical proportions? This course examines four case studies of conquerors who attained sovereign power in times of war (conquest, civil war, revolution), who had a foundational role in empire-building, and who consciously strove to link themselves to the divine and transcendent. Their immense but ambiguous legacies persist to this day. Although each is distinct as a historical individual, taken together they merge to form a paradigm of the exceptional leader of epic proportions. Each models himself on exemplary predecessors: each invokes and reinvents myths of origin and projects himself as a model for the future. Basic themes entail mythic history, empire, the exceptional figure, modernity's fascination with antiquity, and the paradox of the imitability of the inimitable.

Instructor(s): M. Lowrie, R. Morrissey Terms Offered: Spring

Prerequisite(s): Third- or fourth-year standing

Equivalent Course(s): CLAS 36713, CLCV 26713, FNDL 22912, FREN 26701, BPRO

26700

# FREN 37414. Interpolation: Towards a Poetics of Philology in Early-Modern Europe. 100 Units.

This course will examine the philological notion of interpolation—the insertion of new material into a text perceived to be faulty or lacking—not only as an operation of textual reparation or editorial alteration, but more importantly as constituting in and of itself a form of literary writing or authorship, whose poetics we will explore. What is, we will ask, the relation between literary scholarship and literary creation? We will concentrate primarily, but not exclusively, on early-modern writings, employing a comparative perspective which will allow the examination of other artistic practices beyond the literary, including music and sculpture. Among the authors to be considered will be Euripides, Pascal, Mme de Sévigné, Mme Dacier, Furetière, Milton, Swift and Baudelaire. In addition, theoretic readings will be discussed to examine problems such as the coherence and identity of literary texts, the role of the author, and the status of philology and literary criticism.

Instructor(s): S. Rabau Terms Offered: Winter

Note(s): Taught in English, but students registering under the French course number will read French texts in their original language and conduct all written work in French.

Equivalent Course(s): REMS 37414,CMLT 27414,CMLT 37414,FREN 27414

#### FREN 39100. Pascal and Simone Weil. 100 Units.

Pascal in the seventeenth century and Simone Weil in the twentieth formulated a compelling vision of the human condition, torn between greatness and misery. They showed how human imperfection coexists with the noblest callings, how attention struggles with diversion and how individuals can be rescued from their usual reliance on public opinion and customary beliefs. Both thinkers point to the religious dimension of human experience and suggest unorthodox ways of approaching it.

Instructor(s): T. Pavel Terms Offered: Spring Prerequisite(s): Third- or fourth-year standing.

Note(s): The course will be taught in English. For French undergraduates and graduates, we will hold a bi-weekly one-hour meeting to study the original French texts.

Equivalent Course(s): CMLT 29101, CMLT 39101, FNDL 21806, FREN 29100

# FREN 43713. Neo-Avant-Wave: Post-War Film Experiment in France. 100 Units.

The New Wave. The Neo-Avant Garde. Rarely have these film and art movements been placed into an explicit historical or theoretical dialog or dialectic. It will be the task of this seminar to do just that. We will begin our study with a brief look into the pre-WWII situation of radical art and film movements, and classic theories of the avant-garde and neo-avant-garde. Turning our attention to the rise of Lettrism within the context of post-war film and art culture, we will subsequently evaluate the conditions that surrounded the emergence of New Wave filmmaking and criticism, and that include the Situationist International and Nouveau Réalisme. As we move toward and beyond the events of May 1968, we will bring our study of social documentary, politically militant forms, collective film and art practices, and historiography to bear on purportedly stable understandings of the New Wave, its art historical forebearers, and its heirs. Reading knowledge of French is required. While some of our texts will appear in English translation, many will not. The seminar will be conducted in English, but the last thirty minutes of each session will be conducted in French. This component is intended to improve students' oral proficiency, but it will not be used in student evaluation. Screenings are mandatory. With some possible exceptions, films will be subtitled. Students enrolled in FREN 43713 will be required to complete all reading and writing in French.

Instructor(s): Jennifer Wild Terms Offered: Winter Equivalent Course(s): ARTH 43701, CMST 63701

# ROMANCE LANGUAGES AND LITERATURES - ITALIAN COURSES

#### ITAL 33001. Machiavelli and Machiavellism. 100 Units.

This course is a comprehensive introduction to Machiavelli's *The Prince* in light of his vast and varied literary corpus and European reception. The course includes discussion of Machiavelli as playwright (*The Mandrake*), fiction writer (*Belfagor*, *The Golden Ass*), and historian (*Discourses, Florentine Histories*). We will also closely investigate the emergence of myths surrounding Machiavelli (Machiavellism and anti-Machiavellism) in Italy (Guicciardini, Botero, Boccalini), France (Bodin and Gentillet), Spain (Ribadeneyra), and Northern Europe (Hobbes, Grotius, Spinoza) during the Counter Reformation and beyond.

Instructor(s): R. Rubini Terms Offered: Spring

Note(s): Course conducted in English. Those seeking Italian credit will do all work in Italian.

#### ITAL 34803. Outsiders I: Elsa Morante. 100 Units.

One of the most innovative and original writers of the twentieth-century Italy, Elsa Morante (1912-1985) did not enjoy canonization and full integration into the modern Italian novel tradition during her life. From the late 1940s to her death, her works stimulated numerous critical debates, but she remained fundamentally an "outsider" whose art could not find a comfortable place in the prevailing niches into which her more "insider" contemporaries were placed. In this course we shall read and analyze in detail her novels and essays, and consider the earlier and more recent critical reception of her corpus. We shall also consider her influence on subsequent writers, and the ways in which her poetics and practice interact in important ways with feminist, queer, and political theories of current interest. Given that her major novels are translated into English, the course is open to non-specialists of Italian literature, although students concentrating on Italian literature will read the original versions.

Instructor(s): R. West Terms Offered: Winter Equivalent Course(s): GNSE 28601,ITAL 24803

#### ITAL 35500. Poesia lirica del '500. 100 Units.

This course studies the complex Petrarchan and anti-Petrarchan poetic movement in sixteenth-century Italy. We will study in detail a number of major poetic figures, from Pietro Bembo, to Monsignor Della Casa, but also Michelangelo and Ludovico Ariosto. Special attention will be given to several women poets, such as Vittoria Colonna and Veronica Gambara. We will also study the technical aspects of Renaissance lyric poetry (verses, rhetorical devices, etc.) in its relationship with Petrarch's *Canzoniere*. We will also read some important self-commentaries that fundamental poets such as Torquato Tasso wrote about their own poetic compositions.

Instructor(s): A. Maggi Terms Offered: Autumn

Note(s): Taught in Italian.

Equivalent Course(s): REMS 35500,ITAL 25500

#### ITAL 36000. Gramsci. 100 Units.

In this course we read selections from Antonio Gramsci's *Letters* and *Prison Notebooks* side by side with their sources. Gramsci's influential interpretations of the Italian Renaissance, Risorgimento, and Fascism are reviewed *testi alla mano* with the aim of reassessing some major turning points in Italian intellectual history. Readings and notions introduced include, for the Renaissance, Petrarch ("the cosmopolitan intellectual"), Savonarola (the "disarmed prophet"), Machiavelli (the "modern prince"), and Guicciardini (the "particulare"); for Italy's "long Risorgimento," Vico ("living philology"), Cuoco ("passive revolution"), Manzoni ("questione della lingua"), Gioberti ("clericalism"), and De Sanctis (the "Man of Guicciardini"); and Croce (the "anti-Croce") and Pirandello (theater and "national-popular" literature), for Italy's twentieth century.

Instructor(s): R. Rubini Terms Offered: Winter

Equivalent Course(s): REMS 36000,FNDL 26206,ITAL 26000

#### ITAL 38400, Pasolini, 100 Units.

This course examines each aspect of Pasolini's artistic production according to the most recent literary and cultural theories, including Gender Studies. We shall analyze his poetry (in particular "Le Ceneri di Gramsci" and "Poesie informa di rosa"), some of his novels ("Ragazzi di vita," "Una vita violenta," "Teorema," "Petrolio"), and his numerous essays on the relationship between standard Italian and dialects, semiotics and cinema, and the role of intellectuals in contemporary Western culture. We shall also discuss the following films: "Accattone," "La ricotta," "Edipo Re," "Teorema," and "Salo."

Instructor(s): A. Maggi Terms Offered: Winter

Equivalent Course(s): CMST 23500,CMST 33500,GNSE 28600,FNDL 28401,ITAL 28400

# ROMANCE LANGUAGES AND LITERATURES - PORTUGUESE COURSES **PORT 36502.** Brazilian Literature and Cinema. 100 Units.

In this class, we will discuss the intricate and complex relationship between literature and film in Brazilian culture. Should film adaptations be faithful to the novels by which they were inspired? Should such films be regarded as interpretations of the original text or should they be evaluated as an autonomous cultural production? What role do they play in the process of canonization of a literary work? Those are questions that we will try to answer throughout the quarter.

Instructor(s): A. Melo Terms Offered: Autumn

Note(s): All the books will be available in English. Taught in English with an additional weekly session in Portuguese for students seeking Portuguese credit. Equivalent Course(s): LACS 26602, LACS 36602, PORT 26502

## PORT 37000. Lusophone Postcolonial Studies. 100 Units.

The main goal of this seminar is to discuss the specificities and predicaments of Lusophone Postcolonial Studies. In what sense can Portuguese colonialism be compared to its British and French counterparts? What was the role played by Brazil in the relation between Portugal and Lusophone Africa? (Did Brazil represent a model to be followed by African anti-colonial intellectuals in their search for political and cultural independence? Or was Brazil complicit with Portuguese colonialism?) How should we account for this kind of South-South relationship between Brazil and Lusophone African countries? These are the questions we will address in this seminar.

Instructor(s): A. Melo Terms Offered: Autumn

Note(s): Taught in English with an additional weekly session in Portuguese for students seeking Portuguese credit.

Equivalent Course(s): LACS 27004, LACS 37004, PORT 27000

# Romance Languages and Literatures - Renaissance and Early Modern Studies Courses

### REMS 32775. Montaigne: vie privée et vie publique. 100 Units.

La constitution littéraire et philosophique des *Essais* fut influencée par le souci de Montaigne de réaliser des ambitions et des aspirations politiques. Il faut démythifier l'image d'Épinal qui présente l'essayiste isolé dans sa tour, loin des agitations de son temps, jouant avec sa chatte et s'interrogeant sur la condition humaine. Cette lecture d'un Montaigne public a pour but de mieux comprendre les transformations des *Essais* sur vingt ans (1572-1592). La gageure est de considérer Montaigne et ses stratégies de publication des *Essais* – différentes dans le temps – dans le cadre d'une carrière publique (où plutôt de carrières au pluriel) et à la lumière des événements de leur temps qui marquent et influences ses choix. Il ne s'agit pas de coller Montaigne à l'histoire de son temps, mais d'offrir une nouvelle interprétation des *Essais* et de considérer ce que son livre a pu représenter aux yeux de leur auteur et de ses lecteurs à des moments différents d'une longue carrière publique comme conseiller au parlement de Bordeaux, maire de cette cité et négociateur entre Henri III et Henri de Navarre.

Instructor(s): P. Desan Terms Offered: Winter

Note(s): Taught in French.

Equivalent Course(s): FREN 32775, FNDL 22714, FREN 22775

#### REMS 33001. Machiavelli and Machiavellism. 100 Units.

This course is a comprehensive introduction to Machiavelli's *The Prince* in light of his vast and varied literary corpus and European reception. The course includes discussion of Machiavelli as playwright (*The Mandrake*), fiction writer (*Belfagor*, *The Golden Ass*), and historian (*Discourses*, *Florentine Histories*). We will also closely investigate the emergence of myths surrounding Machiavelli (Machiavellism and anti-Machiavellism) in Italy (Guicciardini, Botero, Boccalini), France (Bodin and Gentillet), Spain (Ribadeneyra), and Northern Europe (Hobbes, Grotius, Spinoza) during the Counter Reformation and beyond.

Instructor(s): R. Rubini Terms Offered: Spring

Note(s): Course conducted in English. Those seeking Italian credit will do all work in Italian.

Equivalent Course(s): FNDL 21603, CMLT 25801, ITAL 23000

#### REMS 34301. Le Règne des passions au 17e siècle. 100 Units.

This course is a study of the Early Modern vision of human passions, as reflected in literature. We read plays by Shakespeare, Corneille and Racine, narratives by Cervantes, d'Urfé, Saint-Réal, and Mme de La Fayette and maxims by La Rochefoucauld and Pascal.

Instructor(s): T. Pavel Terms Offered: Winter

Prerequisite(s): For undergrad students, third- or fourth-year standing.

Note(s): The course is in French and most required texts are in French.

Equivalent Course(s): FREN 24301, FREN 34301

# REMS 35200. Pour une lecture politique et économique de Rabelais. 100 Units.

Nous aborderons Rabelais dans le cadre politique de la Renaissance. Entre autres thèmes, nous étudierons le déclin des valeurs nobiliaires et la montée de l'idéologie bourgeoise, offrant les premiers fondements de la modernité. Le personnage de Panurge sera au centre de notre lecture du *Pantagruel*, du *Tiers Livre* et du *Quart Livre*. La guerre, le commerce, la religion, le voyage et l'organisation sociale et politique de la société retiendront plus particulièrement notre attention. À travers Rabelais nous étudierons aussi l'imaginaire économique de la Renaissance, notamment les questions de production, consommation, inflation, thésaurisation, etc.

Instructor(s): P. Desan Terms Offered: Autumn

Note(s): Taught in French. Undergrads permitted with consent of instructor.

Equivalent Course(s): FREN 35200,FREN 25200

#### REMS 35500. Poesia lirica del '500. 100 Units.

This course studies the complex Petrarchan and anti-Petrarchan poetic movement in sixteenth-century Italy. We will study in detail a number of major poetic figures, from Pietro Bembo, to Monsignor Della Casa, but also Michelangelo and Ludovico Ariosto. Special attention will be given to several women poets, such as Vittoria Colonna and Veronica Gambara. We will also study the technical aspects of Renaissance lyric poetry (verses, rhetorical devices, etc.) in its relationship with Petrarch's *Canzoniere*. We will also read some important self-commentaries that fundamental poets such as Torquato Tasso wrote about their own poetic compositions.

Instructor(s): A. Maggi Terms Offered: Autumn

Note(s): Taught in Italian.

Equivalent Course(s): ITAL 35500,ITAL 25500

#### REMS 36000. Gramsci. 100 Units.

In this course we read selections from Antonio Gramsci's *Letters* and *Prison Notebooks* side by side with their sources. Gramsci's influential interpretations of the Italian Renaissance, Risorgimento, and Fascism are reviewed *testi alla mano* with the aim of reassessing some major turning points in Italian intellectual history. Readings and notions introduced include, for the Renaissance, Petrarch ("the cosmopolitan intellectual"), Savonarola (the "disarmed prophet"), Machiavelli (the "modern prince"), and Guicciardini (the "particulare"); for Italy's "long Risorgimento," Vico ("living philology"), Cuoco ("passive revolution"), Manzoni ("questione della lingua"), Gioberti ("clericalism"), and De Sanctis (the "Man of Guicciardini"); and Croce (the "anti-Croce") and Pirandello (theater and "national-popular" literature), for Italy's twentieth century.

Instructor(s): R. Rubini Terms Offered: Winter

Equivalent Course(s): ITAL 36000, FNDL 26206, ITAL 26000

# REMS 37414. Interpolation: Towards a Poetics of Philology in Early-Modern Europe. 100 Units.

This course will examine the philological notion of interpolation—the insertion of new material into a text perceived to be faulty or lacking—not only as an operation of textual reparation or editorial alteration, but more importantly as constituting in and of itself a form of literary writing or authorship, whose poetics we will explore. What is, we will ask, the relation between literary scholarship and literary creation? We will concentrate primarily, but not exclusively, on early-modern writings, employing a comparative perspective which will allow the examination of other artistic practices beyond the literary, including music and sculpture. Among the authors to be considered will be Euripides, Pascal, Mme de Sévigné, Mme Dacier, Furetière, Milton, Swift and Baudelaire. In addition, theoretic readings will be discussed to examine problems such as the coherence and identity of literary texts, the role of the author, and the status of philology and literary criticism.

Instructor(s): S. Rabau Terms Offered: Winter
Note(s): Taught in English, but students registering under the

Note(s): Taught in English, but students registering under the French course number will read French texts in their original language and conduct all written work in French.

Equivalent Course(s): FREN 37414, CMLT 27414, CMLT 37414, FREN 27414

# ROMANCE LANGUAGES AND LITERATURES - SPANISH COURSES SPAN 33900. El retorno de Astrea: astrología, mito e imperio en el teatro aurisecular. 100 Units.

In classical mythology, Astraea, the goddess of justice, chastity, and truth, was the last of the immortals to leave earth with the decline of the ages. Her return was to signal the dawn of a new Golden Age. During the Spanish seventeenth century, her myth was utilized by a number of playwrights, but particularly by Calderón de la Barca to delve into a series of questions. As an astral myth, it allowed poets to delve into astrological matters at a time when this art still enjoyed much popularity. The course will analyze the presence of planets and zodiacal signs, of miraculous stars and horoscopes to discuss the topical uses of astrology and the limits of its orthodoxy. While Aratus discussed the astronomical implications of the myth in ancient times, Virgil transformed it into an imperial myth, proclaiming that she would return to Rome without the need for ekpyrosis. Thus, Philip IV appropriated the myth in Spain to proclaim the renovation that was to take place during his reign. Playwrights would thus praise Philip through this myth. It also has been argued that Astraea also served to point to the regime's failures. The course will then study the political implications of the myth. Among the plays by Calderón that will be included are: La gran Cenobia, La vida es sueño, El mayor encanto amor, Los tres mayores prodigios, and El monstruo de los jardines.

Instructor(s): F. de Armas Terms Offered: Spring Prerequisite(s): SPAN 21703 and SPAN 21500

Note(s): Taught in Spanish.

Equivalent Course(s): SPAN 23900

# SPAN 34200. Cervantes' Novelas ejemplares and the mysteries of narrative. 100 Units.

This course will re-assess Cervantes' *Novelas ejemplares* during the 400th anniversary of its publication. The course will take as a point of departure two statements made in the Prologue to the collection: that this was the first such collection in Spanish; and that it contains hidden mysteries. Thus, we will study the *Novelas* in the context of the Italian novelle by Boccaccio and Bandello to assess their originality. And we will look for the mysteries in narrative through ekphrasis, onomastics, disruptions in chronology, the doubling of a historical present, the subversion of the romance mode and the geographical amplitude of the tales. The course will conclude with a look at later Spanish *novelas* in order to gain further insight as to Cervantes' innovative techniques.

Instructor(s): F. de Armas Terms Offered: Autumn

Note(s): Taught in Spanish

# SPAN 35013. Theories and Practices of Everyday Life in Catalan Literature and Cinema. 100 Units.

Thanks to the theoretical reflections of some of the great French thinkers of the 1970s (Blanchot, Barthes, Lefebvre, De Certeau, Perec, etc.) and some of the major critics of more recent times (Sheringham, Highmore, Gumbrecht, etc.), one can analyze the concept of the "representations of everyday life" as a central axis of art, carrying out a vast, exhaustive, and systematic exploration of contemporary novel and cinema, among other artistic forms like photography. This course explores some of the major examples of everyday life representations both urban and rural in contemporary Catalan culture through the analysis of some novels, short stories, travel writings, and films. The course favours a historical, inderdisciplinary, and intertextual approach that facilitates interconnected readings of the texts selected for in-depth analysis. In order to enable the students to engage with the texts under study in an informed and scholarly manner, a number of theoretical approaches to everyday life theories will be developed. Special attention will be directed toward relationship between fiction and reality, literature and history, witness and literary reworking, the uses of literary images as historical evidences, Barcelona's literary representation, etc.

Instructor(s): X. Pla Terms Offered: Autumn

Note(s): Texts and films originally published in Catalan will be provided in translation into English or Spanish. Classes will be conducted in Spanish or English. Equivalent Course(s): CATA 35013, SPAN 25013, CATA 25013

# SPAN 35800. Modernidad, literatura y cultura visual en Hispanoamérica. 100 Units.

This course will explore the relationship between visual culture and Spanish-American literary and artistic production from the nineteenth century through the present, focusing on the development of a modernizing cultural discourse. Drawing from a variety of materials such as literary texts, essays, photographs, advertisements, and films, we will examine the intersections between different practices of writing and multiple visual manifestations. Themes include nineteenth-century travel narrative, costumbrismo, the world's fairs, aesthetics and advertising, photography and memory, the gaze, and the practice of everyday life. Authors, filmmakers, and artists may include Humboldt, Desiré Charnay, Rubén Darío, Julio Ruelas, Felisberto Hernández, Raúl Ruiz, Mario Bellatín, Silvia Gruner, and Guadalupe Nettel. Theoretical readings include: Barthes, Benjamin, Berger, Crary, Deleuze, Freud, Simmel, Sontag, Taussig, and Williams.

Instructor(s): L. Gandolfi Terms Offered: Spring

Prerequisite(s): For undergrad students, third- or fourth-year standing

Note(s): Taught in Spanish

Equivalent Course(s): SPAN 25800

## SPAN 36013. El concepto en la poesía de Góngora. 100 Units.

La poesía gongorina es la expresión más alta del Barroco hispánico. Góngora es la piedra de toque de cualquier lector. Tradicionalmente se ha acusado a la poesía de Góngora de oscura e ininteligible. Igualmente se ha señalado al poeta como el adalid de un movimiento llamado "culteranismo", opuesto al "conceptismo", comandado por Quevedo. Nada más falso: no hay tales escuelas ni mucho menos se encuentran contrapuestas: ni Góngora es "culterano", ni Quevedo "conceptista". Es más, el eje de la lírica gongorina es la elaboración de conceptos complejos. Este curso pretende dejar atrás estas falsas categorías histórico-literarias y desterrar la alegada "oscuridad gongorina", para mostrar que la poesía de Góngora es la más transparente que se ha compuesto jamás en lengua española, porque es la más objetiva, racional y aquilatada. Es compleja, pero totalmente diáfana. El objetivo del curso es que los alumnos aprendan a leer los poemas de Góngora, a descubrir que en ellos se encuentran todos los elementos necesarios para su comprensión. Góngora es el, tal vez, el poeta más grande del mundo hispánico; el único al que se puede calificar de perfecto; el proceso de aprendizaje que propongo puede resultar muy estimulante, pues permite el acceso a la perfección gongorina, y ejercita la capacidad de lectura en los niveles más altos, agudos y finos.

Instructor(s): M. L. Tenorio Terms Offered: Autumn

Note(s): Taught in Spanish.

Equivalent Course(s): SPAN 26013

# SPAN 37214. Bodies and Sexualities in Contemporary Peninsular Literature. 100 Units.

With an emphasis on close reading of narrative and poetic texts, this course will explore the writing of bodies and sexualities in literary works published from the period of Spain's transition to democracy through the present. Special attention will be directed toward minoritized bodies and sexualities (lesbian, gay, bi, trans, queer) in light of nationalist discourses and Spain's minority languages. Students will engage with varied theoretical texts and critical discourses as we explore authors and poets including Ixtaro Borda, Maria-Mercè Marçal, Mireia Calafell, Terenci Moix, María do Cebreiro, Cristina Peri Rossi, Eduardo Mendicutti, and Najat El Hachmi.

Instructor(s): M. McCarron Terms Offered: Winter

Note(s): Taught in English. Texts originally published in Galician, Basque, or Catalan will be provided in translation into English or Spanish.

Equivalent Course(s): SPAN 27214,GNSE 27214

# SPAN 38800. Problemas críticos en el estudio de las literaturas y culturas ibéricas y latinoamericanas. 100 Units.

In this seminar students will be introduced to some of the main critical and theoretical debates that are taking place at present within Latin American and Iberian literary and cultural studies.

Instructor(s): A. Lugo-Ortiz Terms Offered: Spring

Note(s): Includes an additional colloquium with members of the Hispanic and Luso-Brazilian studies faculty to be scheduled outside seminar hours.

# SPAN 39100. Escribir las cosas: los objetos materiales en la producción literaria y cultural de México. 100 Units.

Pre-Columbian antiquities, local artifacts, luxury goods, European commodities. In this course we will examine the presence and function of different categories of material objects in nineteenth and twentieth-century Mexican literary and artistic production. Using objects as lens, we will focus on the ways in which textual and visual representations of the inanimate world address questions concerning aesthetics and material culture, nationalism, gender, class, and human agency. At the same time, we will engage with theoretical debates on objects, things, commodities, fetishes, practices of collecting, consuming, and exchanging (Agamben, Appadurai, Benjamin, Bodei, Clifford, Freud, Heidegger, Lukács, Marx, Winnicott, among others). Authors and artists may include William Bullock, Manuel Gutiérrez Nájera, Amado Nervo, Manuel Payno, Tina Modotti, Manuel Álvarez Bravo, Salvador Novo, Carlos Fuentes, and Ana Clavel.

Instructor(s): L. Gandolfi Terms Offered: Winter

Note(s): Taught in Spanish

#### ROMANCE LANGUAGES AND LITERATURES COURSES

#### RLLT 32000. What is Art? 100 Units.

The course will address contemporary arguments and claims in aesthetics and the philosophy of art via a detailed discussion of a small number of major texts: Oscar Wilde's "The Decay of Lying" and "The Critic as Artist" (1891), Leo Tolstoy's What Is Art (1898), and Martin Heidegger's The Origin of the Work of Art (1935-7; published 1950). The extravagant claims of these texts are presumed to be of help in describing the ubiquitous attention to art in contemporary affluent societies. A number of more recent essays on aesthetics will also be discussed.

Instructor(s): M. Tamen Terms Offered: Spring

# RLLT 34402. Early Novels: The Ethiopian Story, Parzifal, Old Arcadia. 100 Units.

The course will introduce the students to the oldest sub-genres of the novel, the idealist story, the chivalric tale and the pastoral. It will emphasize the originality of these forms and discuss their interaction with the Spanish, French, and English novel.

Instructor(s): T. Pavel, G. Most Terms Offered: Winter Equivalent Course(s): CMLT 34402,SCTH 35914,RLLT 24402,CMLT 24402

#### RLLT 36000. How to Think about Literature: the Main Notions. 100 Units.

In literary studies new trends and theories rarely supersede older ones. While in physics and biology Aristotle has long been obsolete, literary scholars still find his *Poetics* to be a source of important insights. And yet literary studies are not resistant to change. Over time, they have experienced a genuine historical growth in thinking. Perhaps one can best describe the discipline of literature as a stable field of recurring issues that generate innovative thinking. This course will introduce graduate students to the main notion of the field. Its aim is to identify an object of study that is integral, yet flexible enough to allow for comparisons between its manifestations in various national traditions.

Instructor(s): T. Pavel Terms Offered: Spring

Equivalent Course(s): CMLT 36001

# RLLT 38800. Foreign Language Acquisition, Research and Teaching. 100 Units.

This course provides students with a foundation in foreign language acquisition and sociolinguistic research pertinent to foreign language teaching and introduces current teaching methodologies and technologies and their usefulness in the classroom.

Instructor(s): N. Di Vito Terms Offered: Autumn

Note(s): Open only to RLL students



# DEPARTMENT OF SLAVIC LANGUAGES AND LITERATURES

#### Chair

• Victor Friedman

#### **Professors**

- · Victor A. Friedman
- Lenore Grenoble
- Bozena Shallcross

#### Associate Professors

- Robert Bird
- Malynne M. Sternstein
- Lina Steiner

#### **Assistant Professors**

- Yaroslav Gorbachov
- William Nickell

#### **Senior Lecturers**

- Valentina Pichugin
- Cori Anderson

#### Lecturers

- · Angelina Ilieva
- Kinga Kosmala
- Nada Petkovic Djordjevic
- Tamra Wysocki-Niimi

# **Emeritus Faculty**

- Howard I. Aronson
- Bill Darden
- Norman Ingham
- Samuel Sandler
- Frantisek Svejkovsky
- Edward Wasiolek

#### **Associate Faculty**

- Matthew Jesse Jackson, Art History & Visual Arts
- Boris Maslov, Comparative Literature
- Yuri Tsivian, Art History, Comparative Literature & Cinema and Media Studies
- · Adam Zagajewski, Social Thought
- Tara Zahra, History

# PROGRAM DESCRIPTION

#### THE GRADUATE PROGRAM

Our graduate programs are designed to provide a comprehensive preparation in students' major disciplines and prepare them for a career in Slavic studies, while also encouraging them to explore other related fields. Each graduate track therefore has a minimal list of specific requirements and a maximal amount of flexibility in their fulfillment.

While the requirements for each track of study differ, the following are constant across all tracks. The objective of the program is the Ph.D. degree. Doctoral students in the program are eligible for the M.A. degree after completing the following requirements: successful completion of nine courses, including Old Church Slavonic, and of the master's exam or paper; reading knowledge of French or German; a test for advanced proficiency in speaking and writing the principal Slavic language. After successfully completing nine more courses, passing the comprehensive examinations and demonstrating reading knowledge of both French and German, each candidate must write an acceptable dissertation that makes an original contribution to the advancement of knowledge in the field.

#### SLAVIC LITERATURE

Courses in Slavic literature are taught by internationally renowned faculty with a broad variety of specializations, from medieval Slavic literature to the classic Russian novel to current writing in Russia. Poetry is a particular strength, with detailed coverage of great Russian poetry from Lomonosov, Pushkin, and Akhmatova to Brodsky and beyond. Another strength is Russian intellectual history, from the Slavophiles to Bakhtin. Our offerings also include coverage of contemporary theory and non-verbal media.

MA: Nine quarter courses (including: Proseminar in Literary Theory and Methods; Master's level seminar in Slavic arts and/or culture of specialization; and at least three courses in the literature of specialization) and demonstrated proficiency in speaking and writing the principal Slavic language. An exam demonstrating reading knowledge of French or German is required.

**PhD**: In addition to the courses required at the Master's level, students must take a minimum of nine courses, of which the following are specifically required:

- 1. Advanced research seminar in Slavic and East European literatures
- 2. A second Slavic language (1 year of study or reading knowledge)
- 3. At least 6 courses must be taken in the literature of specialization, including at least one with a significant focus on the theory of literature in the Slavic world.

#### SLAVIC LINGUISTICS AND LANGUAGES

The Department offers options to specialize in Slavic Linguistics (Historical or Synchronic) or Contact Linguistics. Language and linguistics-oriented courses are available in Russian, Czech, Polish, Bosnian/Croatian/Serbian, Macedonian, and Bulgarian as well as Albanian, Georgian, Lak, and Romani. The option to pursue a joint degree in the Department of Linguistics broadens the opportunities for students in Slavic Linguistics.

**MA:** Students take a core set of courses required for all three tracks as well as a set of track-specific courses. All students are required to take a comprehensive written examination based on a departmental reading list and general coursework by the spring quarter of the second year; this exam serves as a Qualifying Examination for advancement to the Ph.D. program.

#### Common MA Core Courses:

The common core courses required of all students are: Introduction to Slavic Linguistics; Old Church Slavonic; Structure of Russian; History of Russian; and advanced knowledge of Russian (this requirement may be met by successfully completing 5th-year Russian).

### Slavic Linguistics (Historical or Synchronic):

Students specializing in Historical or Synchronic Slavic linguistics are expected to demonstrate proficiency in reading a second Slavic language (this second requirement may be met by satisfactorily completing all work of a one-year language course), and courses in the history and structure of the second Slavic language. Two courses in literature or interdisciplinary studies are also required. Comparative Slavic is required for the specialization in Historical linguistics and Advanced Structure of Russian for Synchronic linguistics.

### **Contact Linguistics:**

Students specializing in Contact linguistics must demonstrate proficiency in a relevant language for their area, to be determined in consultation with their adviser. Other required courses include Contact linguistics and two courses in literature or interdisciplinary studies. Courses in anthropological approaches to Language and Culture may serve for the literature/interdisciplinary requirement.

**PhD:** Students who have advanced to the Ph.D. program are expected to demonstrate mastery of their discipline as well as research skills by completion of a Qualifying Paper by the end of the spring quarter of their third year for continuation in the program. The topic of this paper is to be determined in consultation with the adviser. Successful completion of this Qualifying Paper is a prerequisite to defense of the dissertation proposal.

# Common PhD Core courses:

All students are required to take general linguistics courses in Phonetics/ Phonology and Syntax, a research seminar, and at least one upper-level seminar in Slavic or general linguistics.

# **Historical Slavic Linguistics:**

In addition to the core courses, the track in Historical Slavic Linguistics requires: Introduction to Indo-European and Introduction to Historical linguistics, and reading knowledge of one additional Slavic language, so that East, West, and South Slavic languages are all represented.

# **Synchronic Slavic Linguistics:**

In addition to the core courses, the track in Synchronic Slavic Linguistics requires: Advanced Structure of Russian, a second advanced seminar in Slavic or general linguistics (to be determined in consultation with the adviser) and reading knowledge of one additional Slavic language, so that East, West, and South Slavic languages are all represented.

## **Contact Linguistics:**

Students in Contact Linguistics are required to complete Field Methods (I/II), Typology, Introduction to Indo-European or Introduction to Historical Linguistics.

# Advancement to Candidacy:

Upon successful completion of all coursework and the Qualifying Paper, students are expected to defend a dissertation proposal no later than the spring quarter of the fourth year for Advancement to Candidacy.

For exact details of each course of study, please consult the Slavic Department Graduate Student Manual.

#### INTERDISCIPLINARY STUDIES

This cutting edge program offers broad preparation in the relationships among the visual arts, cinema, media, folk and popular culture, as well as Slavic, Balkan, and Baltic languages and literatures. The main thrust of the program is the study of the history and criticism of interdisciplinary approaches to literature and the visual arts. Other emphases include anthropology, language, and intellectual history.

MA: A minimum of nine quarter courses (including: Proseminar in Literary and Interdisciplinary Approaches; and three additional courses in a Slavic or East European Literature, art and/or culture). In consultation with the program advisor, students will submit an MA paper (ordinarily based on a term paper) in partial fulfillment of the requirements for the degree.

**PhD:** In addition to the courses required at the Master's level, students must take a minimum of nine courses, of which the following are specifically required:

- 1. Advanced research seminar in Slavic and East European arts and/or cultures.
- 2. Second Slavic language (1 year of study required).
- At least six courses must be taken in Slavic and East European arts and/or cultures of specialization, including at least one graduate-level seminar in critical theory.

# REQUIREMENTS FOR BOTH THE LITERATURE AND INTERDISCIPLINARY TRACKS

## The Qualifying Examination

In the sixth week of Spring Quarter of the second year, the student must take the Qualifying Exam. The Qualifying Exam is the equivalent of a thesis for an MA that students can receive as a terminal or non-terminal degree. Students should file copies of their examination lists with the Department's administrators and submit them to their exam committee. Students who do not meet this deadline cannot continue in the program. After receiving a High Pass on the Qualifying Examination, the student must start work on the Qualifying Paper.

#### The Qualifying Paper

The Qualifying Paper is an extensive research paper which should demonstrate the ability to conduct independent research and represents an original, publishable contribution to the student's relevant field. The paper is generally 35-50 pages (double-spaced) in length and must be submitted by the seventh week of the spring quarter of the third year. It is written under the guidance of a supervisor, who is a faculty member of the Slavic Department, and in consultation with one additional faculty member who be an affiliate, and is followed by a one-hour long discussion, during which the student responds to the committee's questions. The committee then recommends to the faculty one of the following actions:

- 1. To pass the paper
- 2. To pass the paper conditionally, indicating specific revisions to be made in consultation with the supervisor, with a due date.
  - 3. To fail the paper.

The supervisor will communicate the results to the student. A student who fails the paper may petition the Department to compose another paper in a period not longer than three months. If permission is denied, the student must withdraw from the PhD program. If permission is granted, the student has a period no longer than three months to submit another Qualifying Paper.

### Advancement to Candidacy:

Upon successful completion of all coursework and the Qualifying Paper, students are expected to defend a dissertation proposal no later than the spring quarter of the fourth year for Advancement to Candidacy. Students should identify and select a dissertation committee. One member of the committee is chosen as the dissertation advisor and primary reader; the other two as second and third readers.

# Admissions/Financial aid

The prerequisites for admission are a bachelor's degree or its equivalent and knowledge of written and spoken Russian or of another Slavic language in which the department offers advanced courses sufficient for graduate work, usually equivalent to four years of college study. Entering students are required to take a placement examination in their major Slavic language and to make up any deficiency in their preparation.

Completed applications for admission and aid, along with all supporting materials, are due in mid-December for the academic year that starts in the following Autumn.

Four parts of the application are critically important and should accompany the application: the student's academic record, letters of recommendation submitted by persons able to describe the student's achievements and promise, the student's statement of purpose, which describes the intellectual issues and subjects which they hope to explore at Chicago, and a sample of pertinent written work that demonstrates the applicant's research interests or capabilities. The student's academic record is documented through official transcripts.

Students whose first language is not English must submit scores from the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS). Information about these tests may be obtained from the

Educational Testing Service, Princeton, NJ 08540. The Graduate Record Exam (GRE) is not required of applicants for the PhD in linguistics.

The application process for admission and financial aid for all graduate programs in Humanities is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online at: http://humanities.uchicago.edu/prospective/admissions.html.

Questions pertaining to admissions and aid should be directed to humanitiesadmissions@uchicago.edu or (773) 702-1552.

#### Contact Information

For additional information about the Department of Slavic Languages and Literatures, please see http://slavic.uchicago.edu/ or call (773) 702-8033 or e-mail <slavic-department@uchicago.edu>.

### COURSES

The actual offerings for the year will be found in the quarterly Time Schedules (http://timeschedules.uchicago.edu/).

# SLAVIC LANGUAGES AND LITERATURES - BOSNIAN/CROATIAN/ SERBIAN COURSES

#### BCSN 30100-30200-30300. Advanced Bosnian/Croatian/Serbian I-II-III.

This course is tailored to the needs of the students enrolled, depending on their concentration in the field. It enhances language acquisition with continuous reading and translation of essays, newspaper articles, literary excerpts, letters and other selected writings. Vocabulary building is emphasized by the systematic study of nominal and verbal roots, prefixes and suffixes, and word formation thereafter. Discussion follows each completed reading with a written composition assigned in relation to the topic.

BCSN 30100. Advanced Bosnian/Croatian/Serbian I. 100 Units.

Instructor(s): N. Petkovic Terms Offered: Autumn Prerequisite(s): BCSN 20300 or consent of instructor

BCSN 30200. Advanced Bosnian/Croatian/Serbian II. 100 Units.

Instructor(s): N. Petkovic Terms Offered: Winter

BCSN 30300. Advanced Bosnian/Croatian/Serbian III. 100 Units.

Instructor(s): N. Petkovic Terms Offered: Spring

#### BCSN 30200-30300. Advanced Bosnian/Croatian/Serbian II-III.

This course is tailored to the needs of the students enrolled, depending on their concentration in the field. It enhances language acquisition with continuous reading and translation of essays, newspaper articles, literary excerpts, letters and other selected writings. Vocabulary building is emphasized by the systematic study of nominal and verbal roots, prefixes and suffixes, and word formation thereafter. Discussion follows each completed reading with a written composition assigned in relation to the topic.

BCSN 30200. Advanced Bosnian/Croatian/Serbian II. 100 Units.

Instructor(s): N. Petkovic Terms Offered: Winter

BCSN 30300. Advanced Bosnian/Croatian/Serbian III. 100 Units.

Instructor(s): N. Petkovic Terms Offered: Spring

BCSN 30300. Advanced Bosnian/Croatian/Serbian III. 100 Units.

Instructor(s): N. Petkovic Terms Offered: Spring

#### BCSN 31000-31100-31200. Elementary Bosnian/Croatian/Serbian I-II-III.

The major objective of the course is to build a solid foundation in the basic grammatical patterns of written and spoken Bosnian/Croatian/Serbian, while simultaneously introducing both the Cyrillic and Latin alphabets. This course is complemented with cultural and historical media from the Balkans and is designed for students with a wide range of interests. Screenings of movies and other audiovisual materials are held in addition to scheduled class time. Knowledge of a Slavic language and background in linguistics not required.

#### BCSN 31000. Elementary Bosnian/Croatian/Serbian I. 100 Units.

Instructor(s): N. Petkovic Terms Offered: Autumn

Equivalent Course(s): BCSN 10100

#### BCSN 31100. Elementary Bosnian/Croatian/Serbian II. 100 Units.

Instructor(s): N. Petkovic Terms Offered: Winter

Equivalent Course(s): BCSN 10200

### BCSN 31200. Elementary Bosnian/Croatian/Serbian III. 100 Units.

Instructor(s): N. Petkovic Terms Offered: Spring

Equivalent Course(s): BCSN 10300

# BCSN 31100. Elementary Bosnian/Croatian/Serbian II. 100 Units.

Instructor(s): N. Petkovic Terms Offered: Winter

Equivalent Course(s): BCSN 10200

# BCSN 31200. Elementary Bosnian/Croatian/Serbian III. 100 Units.

Instructor(s): N. Petkovic Terms Offered: Spring

Equivalent Course(s): BCSN 10300

#### BCSN 32000-32100-32200. Intermediate Bosnian/Croatian/Serbian I-II-III.

The first quarter is devoted to an overview of grammar, with emphasis on verbal morphology and syntax, through the reading of a series of literary texts in both the Latin and Cyrillic alphabets. The second and third quarters are devoted to further developing active mastery of Bosian/Croatian/Serbian through continued readings, grammar drills, compositions, and conversational practice. Study of word formation, nominal and adjectival morphology, and syntax are emphasized. Screenings of movies and other audio-visual materials are held in addition to scheduled class time.

#### BCSN 32000. Intermediate Bosnian/Croatian/Serbian I. 100 Units.

Instructor(s): N. Petkovic Terms Offered: Autumn Prerequisite(s): BCSN 10300 or consent of instructor

Equivalent Course(s): BCSN 20100

#### BCSN 32100. Intermediate Bosnian/Croatian/Serbian II. 100 Units.

Instructor(s): N. Petkovic Terms Offered: Winter

Equivalent Course(s): BCSN 20200

# BCSN 32200. Intermediate Bosnian/Croatian/Serbian III. 100 Units.

Instructor(s): N. Petkovic Terms Offered: Spring

Equivalent Course(s): BCSN 20300

#### BCSN 32100. Intermediate Bosnian/Croatian/Serbian II. 100 Units.

Instructor(s): N. Petkovic Terms Offered: Winter

Equivalent Course(s): BCSN 20200

#### BCSN 32200. Intermediate Bosnian/Croatian/Serbian III. 100 Units.

Instructor(s): N. Petkovic Terms Offered: Spring

Equivalent Course(s): BCSN 20300

#### SLAVIC LANGUAGES AND LITERATURES - CZECH COURSES

#### SLAVIC LANGUAGES AND LITERATURES - EAST EUROPEAN COURSES

#### EEUR 30766. Shamans and Oral Poets of Central Asia. 100 Units.

This course explores the rituals, oral literature, and music associated with the nomadic cultures of Central Eurasia.

Instructor(s): K. Arik Terms Offered: Spring

Prerequisite(s): Knowledge of Arabic and/or Islamic studies helpful but not required

Note(s): NEHC 20765 and 20766 may be taken in sequence or individually.

Equivalent Course(s): NEHC 20766, ANTH 25906, EEUR 20766

#### EEUR 30900. Structure of Albanian. 100 Units.

Equivalent Course(s): EEUR 20900, LGLN 29700, LGLN 39700

# EEUR 31000. Romani Language and Linguistics. 100 Units.

This is a beginning course on the language of the Roms (Gypsies) that is based on the Arli dialect currently in official use in the Republic of Macedonia, with attention also given to dialects of Europe and the United States. An introduction to Romani linguistic history is followed by an outline of Romani grammar based on Macedonian Arli, which serves as the basis of comparison with other dialects. We then read authentic texts and discuss questions of grammar, standardization, and Romani language in society.

Instructor(s): V. Friedman Terms Offered: Winter

Equivalent Course(s): LGLN 27800,ANTH 27700,ANTH 47900,EEUR 21000,LGLN 37800

# SLAVIC LANGUAGES AND LITERATURES - GENERAL SLAVIC COURSES SLAV 30303. Jewish Thought and Literature II: Narratives of Assimilation. 100 Units.

Topic: Narratives of Assimilation. This course offers a survey into the manifold strategies of representing the Jewish community in East Central Europe beginning from the nineteenth century to the Holocaust. Engaging the concept of liminality—of a society at the threshold of radical transformation—it will analyze Jewry facing uncertainties and challenges of the modern era and its radical changes. Students will be acquainted with problems of cultural and linguistic isolation, hybrid identity, assimilation, and cultural transmission through a wide array of genres—novel, short story, epic poem, memoir, painting, illustration, film. The course draws on both Jewish and Polish-Jewish sources; all texts are read in English translation. Instructor(s): B. Shallcross Terms Offered: Winter

#### SLAV 32000. Old Church Slavonic. 100 Units.

This course introduces the language of the oldest Slavic texts. It begins with a brief historical overview of the relationship of Old Church Slavonic to Common Slavic and the other Slavic languages. This is followed by a short outline of Old Church Slavonic inflectional morphology. The remainder of the course is spent in the reading and grammatical analysis of original texts. Texts in Cyrillic or Cyrillic transcription of the original Glagolitic.

Terms Offered: Winter

Prerequisite(s): Knowledge of another Slavic language or good knowledge of another one or two old Indo-European languages. SLAV 20100 recommended. Equivalent Course(s): SLAV 22000, LGLN 25100, LGLN 35100

# SLAV 32302. Literatures of the Christian East: Late Antiquity, Byzantium, and Medieval Russia. 100 Units.

After the fall of Rome in 476 CE, literatures of the Latin West and —predominantly Greek-speaking — Eastern provinces of the Roman empire followed two very different paths. Covering both religious and secular genres, we will survey some of the most interesting texts written in the Christian East in the period from 330 CE (foundation of Constantinople) to the late 17th century (Westernization of Russia). Our focus throughout will be on continuities within particular styles and types of discourse (court entertainment, rhetoric, historiography, hagiography) and their functions within East Christian cultures. Readings will include Digenes Akritas and Song of Igor's Campaign, as well as texts by Emperor Julian the Apostate, Gregory of Nazianzus, Emphraim the Syrian, Anna Comnena, Psellos, Ivan the Terrible, and Archbishop Avvakum. No prerequisites. All readings in English.

Instructor(s): Boris Maslov Terms Offered: Spring

Equivalent Course(s): CMLT 32302,CLAS 31113,CLCV 21113,SLAV 22302,CMLT 22302

# SLAV 32303. Prosody and Poetic Form: An Introduction to Comparative Metrics. 100 Units.

This class offers (i) an overview of major European systems of versification, with particular attention to their historical development, and (ii) an introduction to the theory of meter. In addition to analyzing the formal properties of verse, we will inquire into their relevance for the articulation of poetic genres and, more broadly, the history of literary (and sub-literary) systems. There will be some emphasis on Graeco-Roman quantitative metrics, its afterlife, and the evolution of Germanic and Slavic syllabo-tonic verse. No prerequisites, but a working knowledge of one European language besides English is strongly recommended.

Instructor(s): Boris Maslov Terms Offered: Winter

Equivalent Course(s): CMLT 32303,CLCV 21313,CLAS 31313,SLAV 22303,CMLT 22303

#### SLAV 36500. Human Rights in Russia and Eurasia. 100 Units.

This course focuses on the political economy of human rights in Russia and Eurasia. We will study how international norms have been "imported" by post-Soviet states. How have regional politics and cultures shaped how rights norms are understood and how they are protected in practice? Why do many post-Soviet countries fail to protect the rights of their citizens? Using knowledge of the history, political culture, and social practices of the region, we will work to identify those rights issues with the most potential for positive change and those more likely to remain enduring problems.

Instructor(s): A. Janco Terms Offered: Winter

Equivalent Course(s): HIST 29312, HIST 39313, SLAV 26500, HMRT 26500

#### SLAV 39001. Poetic Cinema. 100 Units.

Films are frequently denoted as "poetic" or "lyrical" in a vague sort of way. It has been applied equally to religious cinema and to the experimental avant-garde. Our task will be to interrogate this concept and to try to define what it actually is denoting. Films and critical texts will mainly be drawn from Soviet and French cinema of the 1920s-1930s and 1960s-1990s. Directors include Dovzhenko, Renoir, Cocteau, Resnais, Maya Deren, Tarkovsky, Pasolini, Jarman, and Sokurov. In addition to sampling these directors' own writings, we shall examine theories of poetic cinema by major critics from the Russian formalists to Andre Bazin beyond. Instructor(s): R. Bird

Equivalent Course(s): CMST 25501, CMST 35501, SLAV 29001

# SLAV 42802. Concepts, Metaphors, Genealogies: Historical Semantics and Literature. 100 Units.

In this seminar, we will approach conceptual history (a.k.a. Begriffsgeschichte) as a resource for philologically-informed study of cultural interaction, continuity, and change. We will begin by developing a theoretical background in historical semantics, conceptual history, Metaphorologie, and history of ideas (focusing on the work of Nietzsche, Spitzer, Koselleck, Blumenberg, and Hadot); the second part of the quarter will be dedicated to historical and theoretical problems in the study of concepts in literary texts and across cultures. Reading knowledge of two (or more) foreign languages is a strong desideratum. As a final project, seminar participants will be expected to choose a particular concept and trace its history and uses in literary texts, ideally in more than one language.

Instructor(s): Boris Maslov Terms Offered: Spring Equivalent Course(s): CLAS 42813,CMLT 42802

# SLAVIC LANGUAGES AND LITERATURES - POLISH COURSES

#### POLI 30100-30200-30300. Advanced Polish I-II-III.

Students in this course discuss selected readings (primarily short stories chosen by the instructor) in Polish during the week. The level of work is adjusted to each student's level of preparation. All work in Polish.

POLI 30100, Advanced Polish I, 100 Units.

Terms Offered: Autumn

Prerequisite(s): POLI 20300 or equivalent

POLI 30200. Advanced Polish II. 100 Units.

Terms Offered: Winter

POLI 30300. Advanced Polish III. 100 Units.

Terms Offered: Spring

POLI 30200. Advanced Polish II. 100 Units.

Terms Offered: Winter

POLI 30300. Advanced Polish III. 100 Units.

Terms Offered: Spring

# POLI 35301. Gombrowicz: The Writer as Philosopher. 100 Units.

In this course, we dwell on Witold Gombrowicz the philosopher, exploring the components of his authorial style and concepts that substantiate his claim to both the literary and the philosophical spheres. Entangled in an ongoing battle with basic philosophical tenets and, indeed, with existence itself, this erudite Polish author is a prime example of a 20th century modernist whose philosophical novels explode with uncanny laughter. In contrast to many of his contemporaries, who established their reputations as writers/philosophers, Gombrowicz applied distinctly literary models to the same questions that they explored. We investigate these models in depth, as we focus on Gombrowicz's novels, philosophical lectures, and some of his autobiographical writings. With an insight from recent criticism of these primary texts, we seek answers to the more general question: What makes this author a philosopher?

Instructor(s): B. Shallcross Terms Offered: Autumn

Note(s): All readings in English.

Equivalent Course(s): ISHU 29405, FNDL 26903, POLI 25301

### POLI 35302. Kieslowski: The Decalogue. 100 Units.

In this class, we study the monumental series "The Decalogue" by one of the most influential filmmakers from Poland, Krzysztof Kieślowski. Without mechanically relating the films to the Ten Commandments, Kieślowski explores the relevance of the biblical moral rules to the state of modern man forced to make ethical choices. Each part of the series contests the absolutism of moral axioms through narrative twists and reversals in a wide, universalized sphere. An analysis of the films will be accompanied by readings from Kieślowski's own writings and interviews, including criticism by Zizek, Insdorf, and others.

Instructor(s): B. Shallcross Terms Offered: Autumn

Note(s): Each half-hour long film will be viewed separately. All materials in English. Equivalent Course(s): FNDL 24002, POLI 25302

#### POLI 35303. Kieslowski's French Cinema. 100 Units.

Krzysztof Kieślowski's long-lived obsession with parallel histories and repeated chances is best illustrated by his *The Double Life of Veronique*. The possibility of free choice resulting in being granted a second chance conjoins this film with his French triptych *White, Blue, Red,* all co-written by Krzysztof Piesiewicz. In this course we discuss why and how in the Kieślowski/Piesiewicz virtual universe the possibility of reconstituting one's identity, triggered by tragic loss and betrayal, reveals an ever-ambiguous reality. We also analyze how these concepts, posited with visually and aurally dazzling artistry, shift the popular image of Kieślowski as auteur to his viewers' as co-creators. We read selections from current criticism on the "Three Color Trilogy." All materials in English.

Instructor(s): B. Shallcross Terms Offered: Spring Equivalent Course(s): FNDL 25312,POLI 25303

# SLAVIC LANGUAGES AND LITERATURES - RUSSIAN COURSES

# RUSS 30102-30202-30302. Advanced Russian through Media I-II-III.

This course, which is designed for fifth-year students of Russian, covers various aspects of Russian stylistics and discourse grammar in context. It emphasizes the four communicative skills (i.e., reading, writing, listening comprehension, speaking) in culturally authentic context. Clips from Russian/Soviet films and television news reports are shown and discussed in class. Classes conducted in Russian. Conversation practice is held twice a week.

# RUSS 30102. Advanced Russian through Media I. 100 Units.

Instructor(s): V. Pichugin Terms Offered: Autumn Prerequisite(s): RUSS 21002 or consent of instructor

Equivalent Course(s): RUSS 21302

#### RUSS 30202. Advanced Russian through Media II. 100 Units.

Instructor(s): V. Pichugin Terms Offered: Winter

Equivalent Course(s): RUSS 21402

# RUSS 30302. Advanced Russian through Media III. 100 Units.

Instructor(s): V. Pichugin Terms Offered: Spring

Equivalent Course(s): RUSS 21502

### RUSS 30202. Advanced Russian through Media II. 100 Units.

Instructor(s): V. Pichugin Terms Offered: Winter

Equivalent Course(s): RUSS 21402

# RUSS 30302. Advanced Russian through Media III. 100 Units.

Instructor(s): V. Pichugin Terms Offered: Spring

Equivalent Course(s): RUSS 21502

# RUSS 34101. Pushkin and His Age. 100 Units.

This course approaches the Golden Age of Russian culture through the prism of the artistic and intellectual legacy of its most influential writer. We read and analyze Pushkin's poetry, prose fiction, essays, and critical works in the context of the critical, philosophical, and political debates of his time. We also consider writers such as Rousseau, Montesquieu, Karamzin, Balzac, Chaadaev, and Belinsky. Texts in English or the original; classes conducted in English.

Instructor(s): Daria Khitrova Terms Offered: Autumn Equivalent Course(s): HIST 23602,HIST 33602,RUSS 24101

# RUSS 34504. Russian Poetry from Blok to Pasternak. 100 Units.

We will survey the selected poetry of major Russian modernists from 1900 to 1935, including lyrical and narrative genres. Poets covered include: Aleksandr Blok, Andrei Belyi, Viacheslav Ivanov, Nikolai Gumilev, Osip Mandel'shtam, Anna Akhmatova, Velimir Khlebnikov, Vladimir Mayakovsky, Marina Tsvetaeva, Boris Pasternak. In addition to tracing the development of poetic doctrines (from symbolism through acmeism and futurism), we will investigate the close correlations between formal innovation and the changing semantics of Russian poetry. Attention will also be paid to contemporary developments in Western European poetry. Knowledge of Russian required.

Instructor(s): R. Bird, B. Maslov Terms Offered: Winter

Prerequisite(s): Knowledge of Russian required.

Equivalent Course(s): CMLT 34504

# RUSS 34802. Faith, Doubt and Secularization in 19th-Century Russia. 100 Units.

Instructor(s): Lina Steiner Terms Offered: Autumn

### RUSS 35500. Russian Literature from Classicism to Romanticism. 100 Units.

This course offers a survey of the main literary movements, schools, and genres during the period from the 1760s to the 1830s. We will explore the main works of Russian new-classical, pre-romantic, and romantic authors, including Mikhail Lomonossov, Gavriil Derzhavin, Denis Fonvizin, Nikolai Novikov, Anns Labzina, Nikolai Karamzin, Aleksandr Radischev, Vassilii Pushkin, Denis Davydov, Vassilii Zhukovskii, Alexandr Pushkin, Mikhail Lermontov, and Vladimir Odoevskii. Most texts are available in Russian as well as in translation. However, students are encouraged to read all texts in Russian.

Instructor(s): L. Steiner Terms Offered: Autumn Prerequisite(s): Two years of Russian language

Equivalent Course(s): RUSS 25500

#### RUSS 35600. Realism in Russia. 100 Units.

From the 1830s to the 1890s, most Russian prose writers and playwrights were either engaged in the European-wide cultural movement known as "realistic school" which set for itself the task of engaging with social processes from the standpoint of political ideologies. The ultimate goal of this course is to distill more precise meanings of "realism," "critical realism," and "naturalism" in nineteenth-century Russian through analysis of works by Gogol, Turgenev, Tolstoy, Dostoevsky, Aleksandr Ostrovsky, Goncharov, Saltykov-Shchedrin, and Kuprin. Texts in English and the original. Optional Russian-intensive section offered.

Instructor(s): L. Steiner Terms Offered: Winter

Equivalent Course(s): RUSS 25600

#### RUSS 35700. Russian Literature from Modernism to Post-Modernism. 100 Units.

Given the importance of the written word in Russian culture, it is no surprise that writers were full-blooded participants in Russia's tumultuous recent history, which has lurched from war to war, and from revolution to revolution. The change of political regimes has only been outpaced by the change of aesthetic regimes, from realism to symbolism, and then from socialist realism to post-modernism. We sample the major writers, texts, and literary doctrines, paying close attention to the way they responded and contributed to historical events. This course counts as the third part of the survey of Russian literature. Texts in English.

Instructor(s): W. Nickell Terms Offered: Spring Equivalent Course(s): RUSS 25700,HUMA 24100

# RUSS 36205. Soviet Everyday Life. 100 Units. Instructor(s): W. Nickell Terms Offered: Winter

Equivalent Course(s): RUSS 26205

### RUSS 36206. Jewish Writers in Russian Literature. 100 Units.

Instructor(s): W. Nickell Terms Offered: Spring

Equivalent Course(s): RUSS 26206

# SLAVIC LANGUAGES AND LITERATURES - SOUTH SLAVIC COURSES **SOSL 36800. Balkan Folklore. 100 Units.**

This course is an overview of Balkan folklore from ethnographic, anthropological, historical/political, and performative perspectives. We become acquainted with folk tales, lyric and epic songs, music, and dance. The work of Milman Parry and Albert Lord, who developed their theory of oral composition through work among epic singers in the Balkans, helps us understand folk tradition as a dynamic process. We also consider the function of different folklore genres in the imagining and maintenance of community and the socialization of the individual. We also experience this living tradition first hand through our visit to the classes and rehearsals of the Chicago-based ensemble "Balkanske igre."

Instructor(s): A. Ilieva Terms Offered: Winter

Equivalent Course(s): SOSL 26800,CMLT 23301,CMLT 33301,NEHC 20568,NEHC 30568

# SOSL 37200-37300. Returning the Gaze: The Balkans and Western Europe; The Burden of History: A Nation and Its Lost Paradise.

The Other Within the Self: Identity in Balkan Literature and Film. This two-course sequence examines discursive practices in a number of literary and cinematic works from the South East corner of Europe through which identities in the region become defined by two distinct others: the "barbaric, demonic" Ottoman and the "civilized" Western European.

# SOSL 37200. Returning the Gaze: The Balkans and Western Europe. 100 Units.

This course investigates the complex relationship between South East European self-representations and the imagined Western "gaze" for whose benefit the nations stage their quest for identity and their aspirations for recognition. We also think about differing models of masculinity, the figure of the gypsy as a metaphor for the national self in relation to the West, and the myths Balkans tell about themselves. We conclude by considering the role that the imperative to belong to Western Europe played in the Yugoslav wars of succession. Some possible texts/films are Ivo Andric, Bosnian Chronicle; Aleko Konstantinov, Baj Ganyo; Emir Kusturica, Underground; and Milcho Manchevski, Before the Rain. Instructor(s): A. Ilieva Terms Offered: Autumn

Equivalent Course(s): SOSL 27200, CMLT 23201, CMLT 33201, NEHC 20885, NEHC 30885

# SOSL 37300. The Burden of History: A Nation and Its Lost Paradise. 100

This course begins by defining the nation both historically and conceptually, with attention to Romantic nationalism and its flourishing in Southeastern Europe. We then look at the narrative of original wholeness, loss, and redemption through which Balkan countries retell their Ottoman past. With the help of Freud's analysis of masochistic desire and Žižek's theory of the subject as constituted by trauma, we contemplate the national fixation on the trauma of loss and the dynamic between victimhood and sublimity. The figure of the Janissary highlights the significance of the other in the definition of the self. Some possible texts are Petar Njegoš's Mountain Wreath; Ismail Kadare's The Castle; and Anton Donchev's Time of Parting.

Instructor(s): A. Ilieva Terms Offered: Winter Equivalent Course(s): CMLT 23401, CMLT 33401, NEHC 20573, NEHC 30573,SOSL 27300

SOSL 37300. The Burden of History: A Nation and Its Lost Paradise. 100 Units.

This course begins by defining the nation both historically and conceptually, with attention to Romantic nationalism and its flourishing in Southeastern Europe. We then look at the narrative of original wholeness, loss, and redemption through which Balkan countries retell their Ottoman past. With the help of Freud's analysis of masochistic desire and Žižek's theory of the subject as constituted by trauma, we contemplate the national fixation on the trauma of loss and the dynamic between victimhood and sublimity. The figure of the Janissary highlights the significance of the other in the definition of the self. Some possible texts are Petar Njegoš's Mountain Wreath; Ismail Kadare's The Castle; and Anton Donchev's Time of Parting.

Instructor(s): A. Ilieva Terms Offered: Winter

Equivalent Course(s): CMLT 23401, CMLT 33401, NEHC 20573, NEHC 30573, SOSL 27300

# SOSL 37610. Gender in the Balkans through Literature and Film. 100 Units.

This introductory course examines the poetics of femininity and masculinity in some of the best works of the Balkan region. We contemplate how the experiences of masculinity and femininity are constituted and the issues of socialization related to these modes of being. Topics include the traditional family model, the challenges of modernization and urbanization, the socialist paradigm, and the post-socialist changes. Finally, we consider the relation between gender and nation, especially in the context of the dissolution of Yugoslavia. All work in English.

Instructor(s): A. Ilieva Terms Offered: Winter



# Department of South Asian Languages and Civilizations

#### Chair

- Ulrike Stark
   Professors
- Muzaffar Alam
- Dipesh Chakrabarty
- Steven Collins
- · Wendy Doniger
- Ulrike Stark
- Gary Tubb
   Associate Professors
- Sascha Ebeling
- Rochona Majumdar Assistant Professors
- Whitney Cox
- Thibaut d'Hubert Visiting Professors
- E. Annamalai Senior Lecturers
- Elena Bashir
- Philip Engblom
- Jason Grunebaum Lecturers
- Mandira Bhaduri
- Nisha Kommattam
- Karma T. Ngodup Emeritus Faculty
- Kali Charan Bahl
- Ronald B. Inden
- · Colin P. Masica
- · C. M. Naim
- Frank E. Reynolds
- · Clinton B.Seely
- Norman H. Zide

The following pages briefly describe the requirements of the Department's Ph.D. degree program, sources of financial aid for graduate students, and resources

for the study of South Asia at the University of Chicago. Please also refer to the Departmental web pages for updated information. Degree requirements are set out in detail, but the notes on other topics found here are intended to provide only general introductions. Names, and phone numbers, e-mail and office addresses of Departmental and other University personnel mentioned in this Handbook will be found on the University websites.

# THE DEPARTMENT

The Department of South Asian Languages and Civilizations is a multidisciplinary department comprised of faculty with expertise in the languages, literatures, histories, philosophies, and religions of South Asia. The examination of South Asian texts, broadly defined, is the guiding principle of our Ph.D. degree, and the dissertation itself. This involves acquaintance with a wide range of South Asian texts and their historical contexts, and theoretical reflection on the conditions of understanding and interpreting these texts. These goals are met through departmental seminars and advanced language courses, which lead up to the dissertation project.

#### **ADVISERS**

Students develop and pursue their individual programs in active consultation with members of the faculty. To advise students on their programs and progress overall, one faculty member acts as the departmental Director of Graduate Studies (for name and contact details, see the Departmental web pages). Students are required to meet the with Director of Graduate Studies regularly in order to have their academic program choices approved. The main advisory function will eventually be assumed by the dissertation chairperson. Students are encouraged to actively seek a faculty member of the Department of South Asian Languages and Civilizations to fill this role as soon as possible, at the latest before the preparation of the dissertation proposal. It is the responsibility of students to familiarize themselves with the requirements of the degree program. If they have any doubts regarding the requirements in general, or their specific applicability to their particular program, it is important to resolve them promptly in consultation with the Director of Graduate Studies. Students should also remember that advising is a joint process: they can only receive guidance when they ask for it.

#### THE DEGREE OF DOCTOR OF PHILOSOPHY

To receive the degree of Ph.D. in South Asian Languages and Civilizations, a student must complete a minimum of 18 courses (the actual number of course may be higher depending on the language proficiency of the student). These include the required language courses, the 3 required Departmental seminars, and other courses relevant to the student's chosen specialty. The latter may include courses offered in other departments as well as in SALC. Students may not receive a grade of 'R' in any of the courses counted among the required 18 courses, and none of these may be an informal reading course. These requirements must be fulfilled before admission to candidacy.

Students with prior graduate work in South Asian languages and civilizations or those holding a relevant Master's degree may petition at the end of their first year to satisfy a portion of the 18-course requirement. Only courses taken at accredited institutions will be accepted, and the petition will have to be approved by the departmental Director of Graduate Studies.

Before being admitted to candidacy, Ph.D. students must, in addition to completing at least 18 courses, also fulfill the following requirements which are given in further detail below:

- · Meet general language requirements
- Complete the three required departmental seminars
- Receive a passing grade on the two qualifying papers
- · Formulate two reading lists and pass an oral examination based on them
- Write and defend a dissertation proposal

The Ph.D. is awarded following approval and successful defense of the completed dissertation.

Students normally take 3 to 5 years to complete all pre-dissertation. Students who have not completed the Ph.D. by the end of the twelfth year will no longer be permitted to register in the degree program, but those who go on to complete their dissertations may petition the Department to be allowed to graduate.

# LANGUAGE REQUIREMENTS

The Department encourages varied research devoted to the ancient, medieval, modern, and contemporary cultures of South Asia. All research in the department has as its main prerequisite suitable advancement in the languages appropriate to a student's chosen field of specialization. The languages in which the department offers concentrations are Bangla, Hindi, Malayalam, Marathi, Pali, Sanskrit, Tamil, Telugu, Tibetan, and Urdu. Persian and Arabic are also available through the Department of Near Eastern Languages and Civilizations. Courses may occasionally be offered in other languages; special arrangements must be made in advance with the instructors of these languages, and students must petition the Department in order to count these languages for their requirements.

Three languages are required:

- The South Asian language of concentration (the major language)
- A second South Asian language relevant to the student's program of study (the minor language)
- A third language of scholarship (e.g. French, German, Hindi, Japanese, etc.)

Students are required to achieve highest proficiency in their major language. Students who already possess both linguistic competence and analytical skills in their major language should contact the language instructor for placement at the appropriate level. However, at least one year of advanced language courses in the Department of South Asian Languages and Civilizations has to be successfully completed regardless of the student's level of language competence. Two years of advanced language courses in the Department of South Asian Languages and

Civilizations have to be attended regardless of the student's level of language competence.

In their minor language, students are required to achieve a proficiency equivalent to at least 2 years of formal study at the University of Chicago. Again, students who already possess knowledge of their minor language should contact the language instructor to determine the level of proficiency. Students who already possess a proficiency level equivalent to 2 years of formal study at the University of Chicago may fulfill the requirement by taking an exam without prior coursework.

The student's selection of the major and minor language will have to be approved by the departmental Director of Graduate Studies. While the choice of the major language will obviously depend on the student's research projects, students are strongly encouraged to consider for their minor language one that opens up new perspectives and that will help to gain a broader knowledge of South Asia. Students are expected to demonstrate satisfactory progress each quarter in the required language courses.

For the third language, the language of scholarship, students should choose a language on the basis of how useful it will be for their chosen field of study. They should be able to show that a significant body of scholarship has been or is being produced in that language. The choice of the language of scholarship has to be approved by the departmental Director of Graduate Studies. Proficiency in reading the language of scholarship is assessed by an examination administered by the University Office of Test Administration or by the Department of South Asian Languages and Civilizations, as appropriate to the language in question. A High Pass is required.

# REQUIRED DEPARTMENTAL SEMINARS

Competence in South Asian languages and civilizations is demonstrated as much by close familiarity with South Asian texts as by a broad knowledge of the plurality of South Asian practices and traditions. To this end the Ph.D. program includes three required departmental seminars. These seminars are taught in a two year cycle. The three required seminars must be completed in the first two years.

# Research Themes in South Asian Studies I and II (SALC 40100/40200)

These two seminars will each approach a broad theme in South Asian studies from a perspective transcending any narrow focus on a specific language or region. The objective is to introduce students to current research themes and methods pertinent but not exclusive to the study of South Asia. Seminar topics could include South Asian court cultures, genres, material aspects of textual culture, poetic theories, political thought, translation practices, region in South Asia, etc. The two seminars will be offered in sequence every two years.

# South Asia as a Unit of Study (SALC 40000)

This course aims to acquaint students with major historical and methodological questions pertaining to the field of South Asian languages and civilizations. Topics could include the history of Orientalism, colonial forms of knowledge, South Asia in a global context, etc. This course will be offered in alternate years.

# QUALIFYING PAPERS

In their first year of study, students are required to submit a qualifying paper on a subject agreed upon with a faculty member. This paper should demonstrate the student's ability to write scholarly prose, to formulate a clear research argument, and to situate it within the context of secondary literature relevant to the topic. It must be submitted during the third week of the Spring quarter of the first year. The length of this paper must be 5,000 to 6,000 words, including footnotes and references (12 pt font, double-spaced, with 1 inch margins). There are two grade categories for this first qualifying paper:

- No Pass
- Pass

In their second year of study, students are required to submit a second qualifying paper on a subject agreed upon with a faculty member. This paper should demonstrate the student's ability to formulate a research topic involving primary materials, to argue its importance and to situate it within a history of scholarship, to articulate the principal questions of theory and method relevant to this topic, and to present conclusions in a clear and precise manner. It must be submitted in the third week of the Spring quarter of the second year. The length of this second paper must be 8,000 to 10,000 words, including footnotes and references (formatted as specified above). There are three grade categories for the second qualifying paper:

- No Pass
- Pass (with progress beyond the M.A. degree not permitted)
- Pass

There are two readers for each of the qualifying papers. The second reader is appointed by the Chair of the Department.

# MA Degree

Upon successful completion of the two qualifying papers, students may apply for the M.A. degree. For the degree to be awarded, students must have completed, in addition to the qualifying papers:

- At least two years of the major language
- The three required departmental seminars
- There can be no outstanding Incomplete grades

It is very strongly recommended that students avoid Incomplete grades at all times.

# Reading Lists and Oral Examinations

While the program asks students to pursue specialized research in their area of concentration, it is essential that they do this in relation to a broad understanding of the cultural and historical context in which their objects of specialized study are situated. The Department therefore requires oral examinations on the basis of two reading lists in:

- A major area of study
- A minor area of study

The student's two reading lists are to be designed in consultation with one or more SALC faculty in a given area, and tailored to his or her individual needs. No one faculty member should serve as sole adviser for both lists, and the two lists must be on clearly different areas. The first must deal with the literary, cultural or other history of the student's major language. The second must pertain to an area of South Asian studies other than his or her field of concentration. The reading lists should not exceed twenty books and should constitute a serious, deep, and broad set of readings in important issues in the area of study. The relative weight of primary as opposed to secondary texts should be a matter of consultation between the student and the faculty member(s) concerned.

Each of the two reading lists in their final form must be approved and signed by the faculty member(s) who supervised their preparation. The departmental Chair and Director of Graduate Studies will verify that the lists meet all the formal requirements. An approved and signed copy of each will be deposited in the student's permanent file. These signed copies must be submitted to the departmental office no later than thirty days before the proposed date of the oral examination. It is the student's responsibility to ensure that the reading lists are filed in time.

The faculty members who approve the reading lists serve as examiners for the oral examinations, which are normally taken in the fall or winter quarter of the student's third year. The two exams are administered in one session; each is approximately 45 minutes long. One composite grade – 'No Pass', 'Pass', or 'High Pass' – is awarded for the oral examinations.

#### DISSERTATION PROPOSAL AND ADMISSION TO CANDIDACY

Time to candidacy must be no more than five years. Time to degree must be no more than twelve years.

In order to be admitted to Ph.D. candidacy, a student must write and orally defend a detailed dissertation proposal prepared under the supervision of the dissertation chairperson. Students must have completed all requirements: at least 18 courses, including the three required departmental seminars, the language requirements, and the qualifying papers. All Incompletes and blanks on the student's transcript for required courses must have been removed and the new grade recorded in the Registrar's Office prior to the date of the proposal defense. Admission to candidacy must take place no later than the fifth year of the student's program.

Note that, in accordance with Divisional and Departmental requirements, students must pass the examination in the language of scholarship before being admitted to candidacy. Furthermore, most of the grants which are available to support dissertation research require that a student be admitted to candidacy before taking up the grant.

The proposal should demonstrate a student's awareness of broad theoretical issues and a detailed knowledge of the chosen area of specialization. The dissertation proposal should be 20-25 pages in length. It should provide a clear statement of the scholarly problem to be addressed by the dissertation; the student's theoretical orientation to this problem; a review of previous scholarly work; a provisional

outline of the dissertation as a whole; a plan of research, including archives to be consulted, research sites chosen, a timetable, and a bibliography of no more than two pages.

Prior to the proposal defense, the student and the dissertation chairperson (who must be a member of the Department of South Asian Languages and Civilizations) select the two additional members of the student's dissertation committee. One of the two may be, with the approval of the departmental Chair, from outside the University. The third member must be a University faculty member but need not be a member of SALC. The proposal must be deposited in the form of a printed paper copy in the departmental office at least two weeks prior to the date of the defense, and an abstract of it must be circulated to all SALC faculty. It is the responsibility of the student to ensure that the proposal and the abstract are deposited by this deadline. The proposal is defended orally before the committee and the Department, with the Chair of the Department presiding; these proceedings are open to students and faculty of the University. One purpose of the proposal defense is to familiarize all the members of the Department with a student's research agenda, and provide an opportunity for them to offer guidance. With successful completion of the dissertation proposal defense, the student is admitted to Ph.D. candidacy.

# THE DISSERTATION

It is expected that the dissertation will represent a substantial and original contribution to the study of South Asian languages and civilizations. Upon completion of the dissertation, the student defends it orally before the members of the dissertation committee, a Divisional Representative, and the Department, with the Chair of the Department presiding. Students will follow the guidelines of the University's Dissertation Office in planning the date of their defense, and in formatting the dissertation. See http://www.lib.uchicago.edu/e/phd/.

Two weeks before the scheduled defense, the student must submit a hard copy of the dissertation to each member of his/her committee and the departmental administrator. This task is solely the responsibility and expense of the student. This copy will be a complete, formatted dissertation, with the preliminary pages, main body of work, and end matter included in their entirety, and properly formatted. This copy of the dissertation should be printed on standard white paper and should conform in every way to the requirements outlined by the University's Dissertation Office. The defense will be cancelled if these standards are not met.

The defense proceedings are open only to the University community. Grades awarded for the dissertation are "No Pass," "Conditional Pass," and "Pass." The "Conditional Pass" requires the student to make revisions and obtain the committee's final approval before the Departmental Approval Form will be signed.

# APPLICATION AND ADMISSION

Completed applications for admission and aid, along with all supporting materials, are due in mid-December for the academic year that starts in the following Autumn. Four parts of the application are critically important and should accompany the application: the student's academic record, letters of recommendation submitted by persons able to describe the student's achievements and promise, the student's statement of purpose, which describes the intellectual issues and subjects which they hope to explore at Chicago, and a sample of pertinent written work that demonstrates the applicant's research interests or capabilities. The student's academic record is documented through official transcripts.

Students whose first language is not English must submit scores from the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS). Information about these tests may be obtained from the Educational Testing Service, Princeton, NJ 08540.

The application process for admission and financial aid for all graduate programs in Humanities is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online at: http://humanities.uchicago.edu/prospective/#admissions.

Questions pertaining to admissions and aid should be directed to humanitiesadmissions@uchicago.edu or (773) 702-1552.

# TEACHING OPPORTUNITIES

As part of the student's pedagogical training, students are required to hold three Teaching Assistantships and two Lectureships, usually beginning in their third year. For Lectureships, preference is given to Ph.D. candidates. Students should discuss these arrangements with the GSA and the student's committee chair, but an overview of teaching opportunities and teaching development resources is given below.

Departmental courses provide the major venue for teaching. The two-quarter undergraduate course "Introduction to South Asian Civilizations" regularly involves the participation of one or more graduate students as Teaching Assistants, and sometimes as Lecturers. The T.A.s and Lecturer/s are selected by the faculty coordinators for the course, usually late in the spring quarter of the preceding academic year. Departmental faculty teaching language courses also sometimes hire graduate students as Teaching Assistants and Lecturers. Students may teach a course of their own devising as a Lecturer; this arrangement must be coordinated and approved by the Department Chair, who will contact students about proposals for such.

Students may teach a course of their own devising through competitive "prize seminars" offered by the Stuart Tave Teaching Fellowships and Whiting Undergraduate Teaching Fellowships. The Department nominates students for these fellowships. Students can also apply for the Tave through The Center for Gender Studies (see http://genderstudies.uchicago.edu/grad/teaching.shtml).

Students are also encouraged to pursue teaching opportunities not directly related to South Asian studies, such as positions in the University Writing Program (see http://writing-program.uchicago.edu/jobs/index.htm). We especially encourage students to pursue the position of Writing Intern in the Humanities Common Core

courses through this program. Being a Writing Intern (functionally a T.A.) in these courses provides valuable generalist experience for the job market.

The University sponsors workshops and forums designed to help graduate students develop pedagogically. Contact the Center for Teaching and Learning (see http://teaching.uchicago.edu/). The South Asian Language Research Center, housed at the University, also offers workshops on South Asian language pedagogy targeted towards advanced graduate students interested in language instruction (see http://salrc.uchicago.edu/).

# **FUNDING**

Students admitted to doctoral study are typically awarded a five-year fellowship package that includes full tuition, an academic year stipend, up to four summer stipends, and medical insurance. Teaching training is a vital part of the educational experience at the University, so all fellowships include a required teaching component.

The information given below lists the most common sources of fellowships and grants for graduate students in the Department. Students may also be eligible for other funding administered by the University, private foundations, or other agencies. For information on the full range of sources of support, contact the following:

Office of Graduate Affairs graduate-affairs@uchicago.edu http://grad-affairs.uchicago.edu/programs/index.shtml Humanities Dean of Students Office Walker Museum, Ste. 111 humanitiesadmissions@uchicago.edu http://humanities.uchicago.edu/current/grants.html

# LANGUAGE STUDY FELLOWSHIPS

FLAS Fellowships (Foreign Language and Area Studies Fellowships) are another important source of funding. Recipients must be U.S. citizens or permanent residents, enrolled in at least one language course in the language of the award per quarter, and enroll in at least one course in an appropriate area or international studies subject during the academic year in which they hold a FLAS. Additional details regarding FLAS Fellowships may be found at the Office of Graduate Affairs web site. Qualifying languages taught in the Department are Bengali, Hindi, Malayalam, Marathi, Tamil, Telugu, Tibetan, Urdu, and when offered, Khowar and Panjabi. These fellowships currently cover tuition, health clinic fees, student activities fees, and carry a stipend of \$15,000 for three quarters. A competition for Summer FLAS fellowships for language study takes place concurrently; summer fellowships currently cover program tuition up to \$4000 and provide a stipend of \$2500. Summer FLAS fellowships may be used for eligible programs in the United States and abroad. Contact the South Asia Language and Area Center for information. Note that Summer FLAS Fellowships also may be available from the

institution offering instruction (e.g., SASLI at UW, see below). Contact the institution sponsoring the program for information. Winter Quarter deadline.

We strongly encourage all SALC students to participate in a language study program in South Asia, and/or in the summer at the South Asian Summer Language Institute (SASLI) at the University of Wisconsin, at some time in their graduate career. Receipt of a fellowship for participation in a language program does not affect the total amount of your University funding; rather, the University postpones the funding until you return from your language study fellowship year or summer.

The American Institute of Indian Studies (AIIS) offers fellowships for its intensive nine-month language programs in India. See http://www.indiastudies.org/AIIS.html for details and a current list of the languages offered. AIIS summer language programs offer no funding for participants; students often obtain a summer FLAS fellowship through their home university. COSAS funding is also available for this purpose (see below). UC-Berkeley funds special fellowships for the AIIS Urdu program. See http://southasia.berkeley.edu/fellowship\_berkeley.php. For information, contact Elise Auerbach, Administrator for AIIS, (aiis@uchicago.edu). Winter Ouarter deadline.

aiis@uchicago.edu offers some minimal funding for language study in Sri Lanka. See http://www.aisls.org/fellowship.html. Rolling deadline.

The Committee on Southern Asian Studies (COSAS). Although primarily awarded for dissertation write-up (see below), COSAS fellowship support is also available for summer language study. For application information contact the Committee Office (Kelly 104, tel. 702-8637, snoble@uchicago.edu). Spring Quarter deadline.

Critical Language Scholarships are available for summer intensive language study with AIIS (see above) and the American Institute of Bangladesh Studies, for U.S. citizens. See https://clscholarship.org/home.php. Winter and Spring Quarter deadlines.

The South Asia Summer Language Institute (SASLI) at the University of Wisconsin-Madison offers FLAS fellowships through UW, with the usual FLAS citizenship restrictions, and Fee Remission Scholarships for which all students are eligible. See http://sasli.wisc.edu/funding/index.htm. Winter Quarter deadline.

# Pre-dissertation Research Support

The Social Science Research Council (SSRC), despite its name, funds humanities projects as well, and offers a Dissertation Proposal Development Fellowship. See http://www.ssrc.org/programs/dpdf/. Winter Quarter deadline.

The American Institute of Bangladesh Studies (AIBS) offers a pre-dissertation fellowship for U.S. citizens or permanent residents. See http://www.aibs.net/predisfellowship.html. Contact AIBS for deadline.

The American Institute of Sri Lankan Studies (AISLS) offers a dissertation planning grant. See http://www.aisls.org/diss-plan.html. Fall Quarter deadline.

The Committee on Southern Asian Studies (COSAS). Although primarily awarded for dissertation write-up (see below), COSAS fellowship support is also available for

pre-dissertation research. For application information contact the Committee Office (Kelly 104, tel. 702-8637, so-asian@uchicago.edu). Spring Quarter deadline.

# FUNDING FOR OVERSEAS DISSERTATION RESEARCH

These fellowships are for students admitted to Ph.D. candidacy. The following are the most common fellowships received by our students, and some South Asia-specific fellowships (as well as one Southeast Asia fellowship). There are several other fellowships for which graduate students in SALC are possibly eligible; see the Office of Graduate Affairs and the Humanities Dean of Students Office for complete databases and application information. Students should apply to as many relevant funding sources as possible.

# THE AMERICAN INSTITUTE OF BANGLADESH STUDIES (AIBS)

Funds dissertation research in Bangladesh. See http://www.aibs.net/juniorfellowship.html. Winter Quarter deadline.

# THE AMERICAN INSTITUTE OF INDIAN STUDIES (AIIS)

Funds dissertation research in India. Note that the July 1 application deadline is approximately one year to one-and-a-half years prior to the time when a grant recipient would begin residence in India. See http://www.indiastudies.org/.

# THE AMERICAN INSTITUTE OF PAKISTAN STUDIES (AIPS)

Offers a fellowship for research on materials related to the history and culture of Pakistan in any country EXCEPT Pakistan and the U.S. See http://www.pakistanstudies-aips.org/. Winter Quarter deadline.

# THE CENTER FOR KHMER STUDIES (CKS)

Offers a Ph.D. Dissertation Research Fellowship for work in Cambodia and neighboring countries. See http://khmerstudies.org/fellowships/senior-fellowships/. Fall Quarter deadline.

# THE COUNCIL OF AMERICAN OVERSEAS RESEARCH CENTERS (CAORC)

Offers a Multi-Country Research Fellowship for research of regional or transregional significance. Fellowships require scholars to conduct research in more than one country, at least one of which hosts a participating American overseas research center. See http://www.caorc.org/fellowships/multi/. Winter Quarter deadline.

#### FULBRIGHT-HAYS DISSERTATION FELLOWSHIP

For research in non-Western countries. See http://www2.ed.gov/programs/iegpsddrap/index.html. Students apply through the University Office of Graduate Affairs. See http://grad-affairs.uchicago.edu/programs/fulbright.shtml. Fall Quarter deadline.

# FULBRIGHT U.S. STUDENT PROGRAM (THROUGH IEE)

This program funds U.S. citizens conducting research abroad. See http://www.iie.org/Template.cfm?section=Fulbright1. Students apply through the

University Office of Graduate Affairs. Contact graduate-affairs@uchicago.edu. Fall Ouarter deadline.

# THE NICHOLSON CENTER FOR BRITISH STUDIES, UNIVERSITY OF CHICAGO

This Center offers a short-term graduate fellowship for UC graduate student research in the British Isles and Ireland, generally for three months or fewer. Those who research the former British Empire are eligible. Applicants have to demonstrate their need to conduct research in the British Isles and/or Ireland. See http://british.uchicago.edu/fellowships.html#gradtravel. Spring Quarter deadline.

# THE SOCIAL SCIENCE RESEARCH COUNCIL (SSRC)

Despite its name, funds humanities research and offers an International Dissertation Research Fellowship. See http://www.ssrc.org/programs/idrf/. Fall Ouarter deadline.

# DISSERTATION WRITE-UP FELLOWSHIPS

Please consult the Office of Graduate Affairs and the Humanities Dean of Students Office for information about external fellowships for the dissertation write-up period.

The University offers several fellowships for dissertation write-up which our students have received in recent years, namely, the Franke Institute, the William Rainey Harper, the Mellon Foundation, and the Whiting dissertation-year fellowships. These are residential fellowships which require presence on campus. The Department nominates students for these fellowships, and the competitions are administered by the Humanities Dean of Students Office. Note that students are not eligible for the Franke, Harper, and Whiting Fellowships beyond the tenth year of their program. For the Mellon, students beyond their sixth year are ineligible. See http://humanities.uchicago.edu/current/#grants for information.

The Martin Marty Center at the Divinity School offers a dissertation fellowship that may interest SALC students. See http://divinity.uchicago.edu/martycenter/fellowships/marty\_dissertation.shtml for application information.

# EXTERNAL FELLOWSHIPS

Please consult the Office of Graduate Affairs and the Humanities Dean of Students Office for information about external fellowships for the dissertation write-up period. In recent years some SALC students have received the following fellowship:

The American Association of University Women Dissertation Fellowship

Available to U.S. citizen/permanent resident women who will complete their dissertation writing during the fellowship period. Scholars engaged in researching gender issues are encouraged to apply. See http://www.aauw.org/learn/fellows\_directory/. Fall quarter deadline.

# The Andrew W. Mellon Foundation/ACLS Dissertation Completion Fellowships

Awardees can generally hold this Fellowship no later than their seventh year. See http://www.acls.org/grants/Default.aspx?id=510&linkidentifier=id&itemid=510;. Fall quarter deadline.

# **CONFERENCE GRANTS**

SALC students are encouraged to organize panels and present papers at annual conferences such as the University of Wisconsin Annual Conference on South Asia, the annual meetings of the Association of Asian Studies, the American Academy of Religion, the American Historical Association, and the Modern Language Association, and their regional conferences, and conferences abroad, if possible. The following are some funding sources for travel to conferences for students presenting papers.

#### The American Institute for Sri Lankan Studies

Offers travel stipends for two annual conferences. See http://www.aisls.org/fellowship.html

#### The Division of the Humanities

Offers a Conference Grant. See http://humanities.uchicago.edu/current/#grants | conference-travel.

#### The Office of Graduate Affairs

Offers the Harrison-Doolittle Conference Grant. See http://grad-affairs.uchicago.edu/programs/doolittle.shtml.

#### LIBRARY RESOURCES

Over 610,000 volumes of books, journals, government documents, maps, pamphlets, films, and sound recordings from all parts of the South Asian subcontinent are housed in the University of Chicago Library system. Publications are available on all aspects of South Asian life and culture, in all major western languages as well as in over thirty languages from all the nation-states of the subcontinent.

In addition to the Library's on-line catalog (http://www.lib.uchicago.edu/e/index.html), area-specific informational resources can be found at the Southern Asia Collection website, http://www.lib.uchicago.edu/e/su/southasia/. A subpage of this site offers cataloging for the 21,000 volumes of Official Publications of the Government of India, deposited with the Regenstein by the British Library: http://www.lib.uchicago.edu/e/su/southasia/off-pubs.html.

#### Office of the Southern Asia Collection

Regenstein Library, Room 560. Bibliographer: James H. Nye, jnye@uchicago.edu. Southern Asia Collection staff members are available for consultation in Regenstein 560 Monday through Friday from 9:00 a.m. to 5:00 p.m. You are encouraged to

consult with the South Asia Librarian, Jim Nye, or one of his staff members, to discuss research needs for your dissertation project.

Following is a list of South Asia-related materials in the Regenstein Library and elsewhere on and near campus:

#### South Asia Reference Collection

Regenstein Fifth Floor Reading Room (RR5) on the far east side. This collection includes some 4,000 reference tools for most South Asian subjects (bibliographies, indexes, census volumes, gazetteers, atlases, dictionaries, standard histories, etc.), plus a selection of current journals, and daily newspapers.

# South Asia Pamphlet Collection

housed on the south wall of RR5 in vertical files for which a key is available in Room 560 during office hours; collection includes several thousand pamphlets, off prints, unpublished conference papers, reading lists and other ephemera; holdings are listed in special catalog drawers marked by yellow tape in the fifth floor South Asia card catalog.

# Map Collection

JRL 370, includes thousands of maps of all parts of South Asia at various scales, and from various periods.

#### Audio-visual materials

These include 16-mm films, videos, audio cassettes, DVDs, etc. Many are in the Regenstein collection catalogue, especially audio recordings of a wide variety of South Asian music. A few South Asian film resources are available at the Film Studies Center. A small library of audio-visual materials is available for check out to graduate students from the South Asia Outreach Office in Kelly Hall.

The nearby Center for Research Libraries (http://catalog.crl.edu/) holds multiple resources, including films from the important South Asia Microform Project. These can be obtained through Interlibrary Loan, or at the CRL Reading Room itself, at 6050 S. Kenwood Avenue (see http://www.crl.edu/about).

South Asian Languages Civilizations - Malayalam Courses

SOUTH ASIAN LANGUAGES CIVILIZATIONS - TELUGU COURSES

# South Asian Languages & Civilizations - Bangla Courses

#### BANG 30100-30200-30300. Third-Year Bangla (Bengali) I-II-III.

When joining this sequence the student is expected to demonstrate the ability to narrate in all time frames of the language. He/She should be able to provide a simple though articulate discourse on familiar topics and subjects directly related to the student's interests. He/She will learn to provide a full account of events and to use appropriately complex sentences in Bangla. We will also focus on some aspects of the technical language pertaining to various domains. The student will be invited to discuss orally on written material studied in class and at home, and he/she will have to produce two to three pages long essays on a given topic. By the end of the Spring Quarter the student will have the necessary tools to expand significantly his/her abilities in order to reach the superior level.

#### BANG 30100. Third-Year Bangla (Bengali) I. 100 Units.

Terms Offered: Autumn

Prerequisite(s): BANG 20300 or comparable level of language skills

#### BANG 30200. Third-Year Bangla (Bengali) II. 100 Units.

Terms Offered: Winter

Prerequisite(s): BANG 30100 or comparable level of language skills

# BANG 30300. Third-Year Bangla (Bengali) III. 100 Units.

Terms Offered: Spring

Prerequisite(s): BANG 30200 or comparable level of language skills

#### BANG 30200. Third-Year Bangla (Bengali) II. 100 Units.

Terms Offered: Winter

Prerequisite(s): BANG 30100 or comparable level of language skills

# BANG 30300. Third-Year Bangla (Bengali) III. 100 Units.

Terms Offered: Spring

Prerequisite(s): BANG 30200 or comparable level of language skills

#### BANG 40100-40200-40300. Fourth-Year Bangla (Bengali) I-II-III.

Students attending this sequence must be able to produce an articulate discourse on subjects related to history and literary criticism. They should also have a good command of Bengali grammar. The course is mainly devoted to the study of selected premodern Bangla texts (narrative literature, devotional and courtly poetry, treatises) in their historical contexts. We propose various readings in the historiography of Bangla literature, philology, and traditional performance of Bangla poetry. According to the corpus studied in class, a basic introduction to the neighboring Oriya and Assamese premodern literary languages may be provided. Besides, material from all periods will be studied according to the student's scholarly interests.

# BANG 40100. Fourth-Year Bangla (Bengali) I. 100 Units.

Terms Offered: Autumn

Prerequisite(s): BANG 30300 or comparable level of language skills

BANG 40200. Fourth-Year Bangla (Bengali) II. 100 Units.

Terms Offered: Winter

Prerequisite(s): BANG 40100 or comparable level of language skills

BANG 40300. Fourth-Year Bangla (Bengali) III. 100 Units.

Terms Offered: Spring

Prerequisite(s): BANG 40200 or comparable level of language skills

BANG 40200. Fourth-Year Bangla (Bengali) II. 100 Units.

Terms Offered: Winter

Prerequisite(s): BANG 40100 or comparable level of language skills

BANG 40300. Fourth-Year Bangla (Bengali) III. 100 Units.

Terms Offered: Spring

Prerequisite(s): BANG 40200 or comparable level of language skills

BANG 47900-47901-47902. Rdgs: Advanced Bangla (Bengali) I-II-III.

Advanced Bangla (Bengali) I-II-III

BANG 47900. Rdgs: Advanced Bangla (Bengali) I. 100 Units.

Terms Offered: Autumn Prerequisite(s): BANG 40300

BANG 47901. Rdgs: Advanced Bangla (Bengali) II. 100 Units.

Terms Offered: Winter Prerequisite(s): BANG 47900

BANG 47902. Rdgs: Advanced Bangla (Bengali) III. 100 Units.

Terms Offered: Spring

Prerequisite(s): BANG 47901

BANG 47901. Rdgs: Advanced Bangla (Bengali) II. 100 Units.

Terms Offered: Winter Prerequisite(s): BANG 47900

BANG 47902. Rdgs: Advanced Bangla (Bengali) III. 100 Units.

Terms Offered: Spring

Prerequisite(s): BANG 47901

South Asian Languages & Civilizations - Hindi Courses

HIND 30100-30200-30300. Third-Year Hindi I-II-III.

Third-Year Hindi I-II-III

HIND 30100. Third-Year Hindi I. 100 Units.

Instructor(s): U. Stark Terms Offered: Autumn

Prerequisite(s): HIND 20300 or comparable level of language skills

HIND 30200. Third-Year Hindi II. 100 Units.

Instructor(s): U. Stark Terms Offered: Winter

Prerequisite(s): HIND 30100 or comparable level of language skills

#### HIND 30300. Third-Year Hindi III. 100 Units.

Instructor(s): U. Stark Terms Offered: Spring

Prerequisite(s): HIND 30200 or comparable level of language skills

### HIND 30200. Third-Year Hindi II. 100 Units.

Instructor(s): U. Stark Terms Offered: Winter

Prerequisite(s): HIND 30100 or comparable level of language skills

#### HIND 30300. Third-Year Hindi III. 100 Units.

Instructor(s): U. Stark Terms Offered: Spring

Prerequisite(s): HIND 30200 or comparable level of language skills

#### HIND 40100-40200-40300. Fourth-Year Hindi I-II-III.

Readings from Hindi literary and journalistic texts and a wide array of other sources depending on student interests, with continuing grammar review and practice in listening comprehension, composition and speech.

#### HIND 40100. Fourth-Year Hindi I. 100 Units.

Instructor(s): U. Stark Terms Offered: Autumn

Prerequisite(s): HIND 30300 or comparable level of language skills

#### HIND 40200. Fourth-Year Hindi II. 100 Units.

Instructor(s): U. Stark Terms Offered: Winter

Prerequisite(s): HIND 40100 or comparable level of language skills

#### HIND 40300. Fourth-Year Hindi III. 100 Units.

Instructor(s): U. Stark Terms Offered: Spring

Prerequisite(s): HIND 40200 or comparable level of language skills

#### HIND 40200. Fourth-Year Hindi II. 100 Units.

Instructor(s): U. Stark Terms Offered: Winter

Prerequisite(s): HIND 40100 or comparable level of language skills

#### HIND 40300. Fourth-Year Hindi III. 100 Units.

Instructor(s): U. Stark Terms Offered: Spring

Prerequisite(s): HIND 40200 or comparable level of language skills

#### HIND 47900-47901-47902. Rdgs: Advanced Hindi I-II-III.

Advanced Hindi I-II-III

#### HIND 47900. Rdgs: Advanced Hindi I. 100 Units.

Instructor(s): U. Stark Terms Offered: Autumn

Prerequisite(s): HIND 40300

#### HIND 47901. Rdgs: Advanced Hindi II. 100 Units.

Instructor(s): U. Stark Terms Offered: Winter

Prerequisite(s): HIND 47900

#### HIND 47902. Rdgs: Advanced Hindi III. 100 Units.

Instructor(s): U. Stark Terms Offered: Spring

Prerequisite(s): HIND 47901

#### HIND 47901. Rdgs: Advanced Hindi II. 100 Units.

Instructor(s): U. Stark Terms Offered: Winter

Prerequisite(s): HIND 47900

# HIND 47902. Rdgs: Advanced Hindi III. 100 Units.

Instructor(s): U. Stark Terms Offered: Spring

Prerequisite(s): HIND 47901

SOUTH ASIAN LANGUAGES & CIVILIZATIONS - MARATHI COURSES

SOUTH ASIAN LANGUAGES & CIVILIZATIONS - PALI COURSES

# South Asian Languages & Civilizations - Sanskrit Courses

#### SANS 30100-30200-30300. Third-Year Sanskrit I-II-III.

Reading selections introduce major Sanskrit genres, including verse and prose narrative, lyric poetry, drama, and the intellectual discourse of religion, philosophy, and the sciences. Analysis of the language and style employed in commentarial texts and practice in reading such texts is also emphasized.

#### SANS 30100. Third-Year Sanskrit I. 100 Units.

Instructor(s): W. Cox Terms Offered: Autumn

Prerequisite(s): SANS 20300 or approval of instructor

#### SANS 30200. Third-Year Sanskrit II, 100 Units.

Instructor(s): G. Tubb Terms Offered: Winter

Prerequisite(s): SANS 30100 or approval of instructor

#### SANS 30300. Third-Year Sanskrit III. 100 Units.

Instructor(s): D. Arnold Terms Offered: Spring

Prerequisite(s): SANS 30200 or approval of instructor

#### SANS 30200. Third-Year Sanskrit II. 100 Units.

Instructor(s): G. Tubb Terms Offered: Winter

Prerequisite(s): SANS 30100 or approval of instructor

#### SANS 30300. Third-Year Sanskrit III. 100 Units.

Instructor(s): D. Arnold Terms Offered: Spring

Prerequisite(s): SANS 30200 or approval of instructor

#### SANS 40100-40200-40300. Fourth-Year Sanskrit I-II-III.

The goal of this sequence is to provide students with strong reading expertise in a wide range of Sanskrit texts in literature (poems and plays, verse and prose) and the scientific and philosophical discourses (e.g., grammar, logic, poetic theory, Buddhist thought), and commentarial literature on both.

#### SANS 40100. Fourth-Year Sanskrit I. 100 Units.

Instructor(s): W. Cox Terms Offered: Autumn

Prerequisite(s): SANS 30300 or approval of instructor

### SANS 40200. Fourth-Year Sanskrit II. 100 Units.

Instructor(s): G. Tubb Terms Offered: Winter

Prerequisite(s): SANS 40100 or approval of instructor

#### SANS 40300. Fourth-Year Sanskrit III. 100 Units.

Instructor(s): D. Arnold Terms Offered: Spring

Prerequisite(s): SANS 40200 or approval of instructor

#### SANS 40200. Fourth-Year Sanskrit II. 100 Units.

Instructor(s): G. Tubb Terms Offered: Winter

Prerequisite(s): SANS 40100 or approval of instructor

#### SANS 40300. Fourth-Year Sanskrit III. 100 Units.

Instructor(s): D. Arnold Terms Offered: Spring

Prerequisite(s): SANS 40200 or approval of instructor

### SANS 47900-47901-47902. Rdgs: Advanced Sanskrit I-II-III.

Advanced Sanskrit I-II-III

# SANS 47900. Rdgs: Advanced Sanskrit I. 100 Units.

Instructor(s): W. Cox Terms Offered: Autumn

Prerequisite(s): SANS 40300

#### SANS 47901. Rdgs: Advanced Sanskrit II. 100 Units.

Instructor(s): G. Tubb Terms Offered: Winter

Prerequisite(s): SANS 47900

#### SANS 47902. Rdgs: Advanced Sanskrit III. 100 Units.

Instructor(s): D. Arnold Terms Offered: Spring

Prerequisite(s): SANS 47901

#### SANS 47901. Rdgs: Advanced Sanskrit II. 100 Units.

Instructor(s): G. Tubb Terms Offered: Winter

Prerequisite(s): SANS 47900

#### SANS 47902. Rdgs: Advanced Sanskrit III. 100 Units.

Instructor(s): D. Arnold Terms Offered: Spring

Prerequisite(s): SANS 47901

# South Asian Languages & Civilizations - South Asian Languages & Civilizations Courses

#### SALC 30800. Music of South Asia. 100 Units.

This course examines the music of South Asia as an aesthetic domain with both unity and particularity in the region. The unity of the North and South Indian classical traditions is treated historically and analytically, with special emphasis placed on correlating their musical and mythological aspects. The classical traditions are contrasted with regional, tribal, and folk music with respect to fundamental conceptualizations of music and the roles it plays in society. In addition, the repertories of Pakistan, Afghanistan, and Sri Lanka, as well as states and nations bordering the region, are covered. Music is also considered as a component of myth, religion, popular culture, and the confrontation with modernity.

Terms Offered: Variable

Prerequisite(s): Any 10000-level music course or consent of instructor

Note(s): This course typically is offered in alternate years.

Equivalent Course(s): MUSI 23700, SALC 20800

# SALC 30900. Cultural Politics of Contemporary India. 100 Units.

Structured as a close-reading seminar, this class offers an anthropological immersion in the cultural politics of urban India today. A guiding thread in the readings is the question of the ideologies and somatics of shifting "middle class" formations; and their articulation through violence, gender, consumerism, religion, and technoscience.

Instructor(s): W. Mazzarella Terms Offered: Not offered 2013-14; will be offered 2014-15

Equivalent Course(s): ANTH 25500, ANTH 42600, SALC 20900

# SALC 37701. Mughal India: Tradition and Transition. 100 Units.

The focus of this course is on the period of Mughal rule during the late sixteenth, seventeenth, and eighteenth centuries, especially on selected issues that have been at the center of historiographical debate in the past decades.

Instructor(s): M. Alam Terms Offered: Winter

Prerequisite(s): Advanced standing and consent of instructor. Prior knowledge of appropriate history and secondary literature.

Equivalent Course(s): SALC 27701, HIST 26602, HIST 36602

#### SALC 39400. South Asia Before the Buddha. 100 Units.

South Asia has a rich historical record, from the very beginnings of our species to the present, and yet the earlier part of this record is surprisingly little-known outside specialist circles. This course provides a broad overview of South Asian archaeology and early history, from the beginnings of agricultural production to the expansion of states and empires in the early days of textual records. We cover critical anthropological processes such as the origins and expansion of agriculture, the development of one of the world's first urban societies—the Harappan or Indus civilization—the growth and institutionalization of social inequalities, and changing contexts of social and religious life. While the course actually extends a bit beyond the time of the Buddha, its major focus is on the periods up to and including the Early Historic. No prior experience of either South Asia or archaeology is assumed; indeed, we will think quite a bit about the nature of evidence and about how we know about the more distant past.

Instructor(s): K. Morrison Terms Offered: Spring

Equivalent Course(s): SALC 25900

#### SALC 39900. Informal Reading Course. 100 Units.

Instructor(s): Student chooses instructor Terms Offered: Autumn, Winter, Spring Note(s): Requires consent of instructor

#### SALC 40200. Research Themes II. 100 Units.

Instructor(s): D. Chakrabarty Terms Offered: Spring

Prerequisite(s): SALC Core Requirement

Note(s): This course has a different topic each quarter it is offered. Spring 2014:

"Varieties of South Asian Pasts" Equivalent Course(s): HIST 46602

# SALC 42501. Many Ramayanas. 100 Units.

This course is a close reading of the great Hindu Epic, the story of Rama's recovery of his wife, Sita, from the demon Ravana on the island of Lanka, with special attention to the changes in the telling of the story throughout Indian history. Readings are in Paula Richman, Many Ramayanas and Questioning Ramayanas; the Ramayanas of Valmiki (in translation by Goldman, Sattar, Shastri, and R. K. Narayan), Kampan, and Tulsi; the Yogavasistha-Maharamayana; and contemporary comic books and films.

Instructor(s): W. Doniger Terms Offered: Winter

Prerequisite(s): Consent of instructor

Equivalent Course(s): HREL 42501, FNDL 22901, RLST 26801, SCTH 40701

#### SALC 48202. Nirvana and Other Buddhist Felicities. 100 Units.

This course will be an in-depth study of Steven Collins' book *Nirvana and Other Buddhist Felicities: Utopias of the Pali Imaginaire,* along with some of the theoretical literature which it uses.

Instructor(s): S. Collins Terms Offered: Autumn 2013

Prerequisite(s): Instructor consent required

Equivalent Course(s): HREL 49000

#### SALC 48400. Second-Year Sanskrit II. 100 Units.

Instructor(s): W. Doniger Terms Offered: Winter

Prerequisite(s): SANS 10300 or comparable level of language skills

Equivalent Course(s): SANS 20200, HREL 36000

# SALC 49900. Thesis Research. 100 Units.

 $Instructor (s) \hbox{:} \ Student\ chooses\ instructor\ Terms\ Offered:\ Autumn,\ Winter,\ Spring$ 

Note(s): Requires consent of instructor

# SOUTH ASIAN LANGUAGES & CIVILIZATIONS - TAMIL COURSES TAML 30100-30200-30300. Third-Year Tamil I-II-III.

On the basis of a variety of readings, such as short stories, poems, excerpts from novels or non-fiction, this course addresses those issues of modern written Tamil grammar which have not been covered during the previous two years. Readings are typically selected with a view to providing important cultural information, and they are supplemented by film clips and other media. Class content may be chosen or adapted based on particular student needs. Further work on listening and speaking proficiency is also part of the course. Based on prior consultation with instructor regarding placement, this course might be an appropriate starting point for speakers of Tamil with previous knowledge (e.g., heritage students).

# TAML 30100. Third-Year Tamil I. 100 Units.

Instructor(s): S. Ebeling Terms Offered: Autumn

Prerequisite(s): TAML 20300 or comparable level of language skills. Prior consent of instructor required.

#### TAML 30200. Third-Year Tamil II. 100 Units.

Instructor(s): S. Ebeling Terms Offered: Winter

Prerequisite(s): TAML 30100 or comparable level of language skills. Prior consent of instructor required.

#### TAML 30300. Third-Year Tamil III. 100 Units.

Instructor(s): S. Ebeling Terms Offered: Spring

Prerequisite(s): TAML 30200 or comparable level of language skills. Prior consent of instructor required.

#### TAML 30200. Third-Year Tamil II. 100 Units.

Instructor(s): S. Ebeling Terms Offered: Winter

Prerequisite(s): TAML 30100 or comparable level of language skills. Prior consent of instructor required.

#### TAML 30300. Third-Year Tamil III. 100 Units.

Instructor(s): S. Ebeling Terms Offered: Spring

Prerequisite(s): TAML 30200 or comparable level of language skills. Prior consent of instructor required.

#### TAML 40100-40200-40300. Fourth-Year Tamil I-II-III.

This course typically includes an introduction to Classical Tamil grammar and literature, with sample readings reaching from the oldest known Tamil literature (Sangam poetry) via bhakti poems to the magnificent courtly compositions of the high and late medieval periods. Various other types of linguistic variation may also be studied, e.g. inscriptional Tamil or dialects/regional language registers. Depending on the students' needs, an overview of Tamil literary history is also given. Native or heritage speakers of Tamil are required to have a solid knowledge of modern Tamil grammar.

#### TAML 40100. Fourth-Year Tamil I. 100 Units.

Instructor(s): S. Ebeling Terms Offered: Autumn

Prerequisite(s): TAML 30300 or comparable level of language skills. Prior consent of instructor required.

#### TAML 40200. Fourth-Year Tamil II. 100 Units.

Instructor(s): S. Ebeling Terms Offered: Winter

Prerequisite(s): TAML 40100 or comparable level of language skills. Prior consent of instructor required.

#### TAML 40300. Fourth-Year Tamil III. 100 Units.

Instructor(s): S. Ebeling Terms Offered: Spring

Prerequisite(s): TAML 40200 or comparable level of language skills. Prior consent of instructor required.

#### TAML 40200. Fourth-Year Tamil II. 100 Units.

Instructor(s): S. Ebeling Terms Offered: Winter

Prerequisite(s): TAML 40100 or comparable level of language skills. Prior consent of instructor required.

#### TAML 40300. Fourth-Year Tamil III. 100 Units.

Instructor(s): S. Ebeling Terms Offered: Spring

Prerequisite(s): TAML 40200 or comparable level of language skills. Prior consent of instructor required.

# TAML 47900-47901-47902. Rdgs: Advanced Tamil; Rdgs: Advanced Tamil II-III.

Advanced Tamil I-II-III

# TAML 47900. Rdgs: Advanced Tamil. 100 Units.

Instructor(s): S. Ebeling Terms Offered: Autumn

Prerequisite(s): TAML 40300

### TAML 47901. Rdgs: Advanced Tamil II. 100 Units.

Instructor(s): S. Ebeling Terms Offered: Winter

Prerequisite(s): TAML 47900

# TAML 47902. Rdgs: Advanced Tamil III. 100 Units.

Instructor(s): S. Ebeling Terms Offered: Spring

Prerequisite(s): TAML 47901

#### TAML 47901. Rdgs: Advanced Tamil II. 100 Units.

Instructor(s): S. Ebeling Terms Offered: Winter

Prerequisite(s): TAML 47900

#### TAML 47902. Rdgs: Advanced Tamil III. 100 Units.

Instructor(s): S. Ebeling Terms Offered: Spring

Prerequisite(s): TAML 47901

# SOUTH ASIAN LANGUAGES & CIVILIZATIONS - TIBETAN COURSES

#### TBTN 30100-30200-30300. Third-Year Tibetan I-II-III.

The third- and fourth-year sequence is meant to expose students to a range of genres in Tibetan literature, including religious, historical, philosophical, scientific, and literary works. Instruction consists in guided readings, with continuing grammar review, practice in speaking, and application of philological methods.

#### TBTN 30100. Third-Year Tibetan I. 100 Units.

Instructor(s): C. Wedemeyer Terms Offered: Autumn Prerequisite(s): TBTN 20300 or consent of instructor

#### TBTN 30200. Third-Year Tibetan II. 100 Units.

Instructor(s): M. Kapstein Terms Offered: Winter Prerequisite(s): TBTN 30100 or consent of instructor

# TBTN 30300. Third-Year Tibetan III. 100 Units.

Instructor(s): K. Ngodup Terms Offered: Spring Prerequisite(s): TBTN 30200 or consent of instructor

# TBTN 30200-30300. Third-Year Tibetan II-III.

Third-Year Tibetan

#### TBTN 30200. Third-Year Tibetan II. 100 Units.

Instructor(s): M. Kapstein Terms Offered: Winter Prerequisite(s): TBTN 30100 or consent of instructor

#### TBTN 30300. Third-Year Tibetan III. 100 Units.

Instructor(s): K. Ngodup Terms Offered: Spring Prerequisite(s): TBTN 30200 or consent of instructor

#### TBTN 30300. Third-Year Tibetan III. 100 Units.

Instructor(s): K. Ngodup Terms Offered: Spring Prerequisite(s): TBTN 30200 or consent of instructor

# TBTN 40100-40200-40300. Fourth-Year Tibetan I-II-III.

The third- and fourth-year sequence is meant to expose students to a range of genres in Tibetan literature, including religious, historical, philosophical, scientific, and literary works. Instruction consists in guided readings, with continuing grammar review, practice in speaking, and application of philological methods.

#### TBTN 40100. Fourth-Year Tibetan I. 100 Units.

Instructor(s): C. Wedemeyer Terms Offered: Autumn Prerequisite(s): TBTN 30300 or consent of instructor

#### TBTN 40200. Fourth-Year Tibetan II. 100 Units.

Instructor(s): M. Kapstein Terms Offered: Winter Prerequisite(s): TBTN 40100 or consent of instructor

#### TBTN 40300. Fourth-Year Tibetan III. 100 Units.

Instructor(s): K. Ngodup Terms Offered: Spring Prerequisite(s): TBTN 40200 or consent of instructor

#### TBTN 40200. Fourth-Year Tibetan II. 100 Units.

Instructor(s): M. Kapstein Terms Offered: Winter Prerequisite(s): TBTN 40100 or consent of instructor

# TBTN 40300. Fourth-Year Tibetan III. 100 Units.

Instructor(s): K. Ngodup Terms Offered: Spring Prerequisite(s): TBTN 40200 or consent of instructor

#### TBTN 47900-47901-47902. Rdgs: Advanced Tibetan I-II-III.

Advanced Tibetan I-II-III

#### TBTN 47900. Rdgs: Advanced Tibetan I. 100 Units.

Instructor(s): C. Wedemeyer Terms Offered: Autumn

Prerequisite(s): TBTN 40300

#### TBTN 47901. Rdgs: Advanced Tibetan II. 100 Units.

Instructor(s): M. Kapstein Terms Offered: Winter

Prerequisite(s): TBTN 47900

#### TBTN 47902. Rdgs: Advanced Tibetan III. 100 Units.

Instructor(s): K. Ngodup Terms Offered: Spring

Prerequisite(s): TBTN 47901

#### TBTN 47901. Rdgs: Advanced Tibetan II. 100 Units.

Instructor(s): M. Kapstein Terms Offered: Winter

Prerequisite(s): TBTN 47900

# TBTN 47902. Rdgs: Advanced Tibetan III. 100 Units.

Instructor(s): K. Ngodup Terms Offered: Spring

Prerequisite(s): TBTN 47901

# South Asian Languages & Civilizations - Urdu Courses

# URDU 30100-30200-30300. Third-Year Urdu I-II-III.

This third- and fourth-year sequence consists of courses primarily in Urdu prose, meant for students who have already mastered the grammar and control vocabulary past the basic level. The two-year cycle includes passages/selections from noted Urdu writers from the late eighteenth through the twentieth century. The sequence has two major goals. The first goal is to emphasize training in comprehension, reading, writing, philology, and discussion (in Urdu). A second goal is to encourage analysis of the widely acknowledged masters of Urdu style by locating them within the larger context of early modern and modern South Asian social and intellectual history.

#### URDU 30100. Third-Year Urdu I. 100 Units.

Instructor(s): M. Alam Terms Offered: Autumn Prerequisite(s): URDU 20300 or consent of instructor

#### URDU 30200. Third-Year Urdu II. 100 Units.

Instructor(s): M. Alam Terms Offered: Winter

Prerequisite(s): URDU 30100 or consent of instructor

#### URDU 30300. Third-Year Urdu III. 100 Units.

Instructor(s): M. Alam Terms Offered: Spring

Prerequisite(s): URDU 30200 or consent of instructor

### URDU 30200-30300. Third-Year Urdu II-III.

Third-Year Urdu I-II-III

#### URDU 30200. Third-Year Urdu II. 100 Units.

Instructor(s): M. Alam Terms Offered: Winter

Prerequisite(s): URDU 30100 or consent of instructor

#### URDU 30300. Third-Year Urdu III. 100 Units.

Instructor(s): M. Alam Terms Offered: Spring

Prerequisite(s): URDU 30200 or consent of instructor

#### URDU 30300. Third-Year Urdu III. 100 Units.

Instructor(s): M. Alam Terms Offered: Spring

Prerequisite(s): URDU 30200 or consent of instructor

#### URDU 40100-40200-40300. Fourth-Year Urdu I-II-III.

This third- and fourth-year sequence consists of courses primarily in Urdu prose, meant for students who have already mastered the grammar and control vocabulary past the basic level. The two-year cycle includes passages/selections from noted Urdu writers from the late eighteenth through the twentieth century. The sequence has two major goals. The first goal is to emphasize training in comprehension, reading, writing, philology, and discussion (in Urdu). A second goal is to encourage analysis of the widely acknowledged masters of Urdu style by locating them within the larger context of early modern and modern South Asian social and intellectual history.

#### URDU 40100. Fourth-Year Urdu I. 100 Units.

Instructor(s): M. Alam

Prerequisite(s): URDU 30300 or consent of instructor

#### URDU 40200. Fourth-Year Urdu II. 100 Units.

Instructor(s): M. Alam

Prerequisite(s): URDU 40100 or consent of instructor

#### URDU 40300. Fourth-Year Urdu III. 100 Units.

Instructor(s): M. Alam

Prerequisite(s): URDU 40200 or consent of instructor

#### URDU 40200. Fourth-Year Urdu II. 100 Units.

Instructor(s): M. Alam

Prerequisite(s): URDU 40100 or consent of instructor

#### URDU 40300. Fourth-Year Urdu III. 100 Units.

Instructor(s): M. Alam

Prerequisite(s): URDU 40200 or consent of instructor

#### URDU 47900-47901-47902. Rdgs: Advanced Urdu I-II-III.

Advanced Urdu I-II-III

#### URDU 47900. Rdgs: Advanced Urdu I. 100 Units.

Instructor(s): M. Alam Terms Offered: Autumn

Prerequisite(s): URDU 40300

#### URDU 47901. Rdgs: Advanced Urdu II. 100 Units.

Instructor(s): M. Alam Terms Offered: Winter

Prerequisite(s): URDU 47900

#### URDU 47902. Rdgs: Advanced Urdu III. 100 Units.

Instructor(s): M. Alam Terms Offered: Spring

Prerequisite(s): URDU 47901

#### URDU 47901. Rdgs: Advanced Urdu II. 100 Units.

Instructor(s): M. Alam Terms Offered: Winter

Prerequisite(s): URDU 47900

URDU 47902. Rdgs: Advanced Urdu III. 100 Units.

Instructor(s): M. Alam Terms Offered: Spring

Prerequisite(s): URDU 47901



### DEPARTMENT OF THE VISUAL ARTS

#### Chair

• Jessica Stockholder, Professor

#### **Professors**

- Charles Cohen, Art History
- Elizabeth Helsinger, English, Art History
- Laura Letinsky, Cinema and Media Studies
- Jessica Stockholder

**Associate Professors** 

- Matthew Jesse Jackson, Art History
- William Pope.L
- Catherine Sullivan

**Assistant Professors** 

- Jason Salavon, Computation Institute
- David Schutter
- Karthik Pandian, Harper Schmidt Fellow Professor of Practice in the Arts
- Geof Oppenheimer

Senior Lecturer

 Judy Hoffman, Cinema and Media Studies Lecturers

- · Katherine Desjardins
- Amber Ginsburg
- Shane Huffman
- Scott Wolniak

Affiliates

- Bill Brown, English
- W. J. T. Mitchell, English, Art History
- Rebecca Zorach, Art History

Associates

 Stephanie Smith, Smart Museum Emeritus Faculty

- Herbert George
- Vera Klement
- Thomas Mapp
- Robert C. Peters

The Department of Visual Arts (DOVA), a department within the Humanities Division at the University of Chicago, and situated in The Reva and David Logan

Center for the Arts (http://arts.uchicago.edu/content/logan-center) at the University of Chicago, is proud to offer a Masters of Fine Arts.

This MFA program is distinguished in its focused attention on understanding how the pluralism of today's art making practices relate to one another and creating conversations that bridge between DOVA and other areas of study at the University of Chicago. Our faculty are diverse in their interests, committed teachers who are engaged in a lively and sustained dialogue within the department, and deeply engaged with their own work.

Our students work in sculpture, photography, painting, installation, performance, video and new media. Students are admitted to the program based on the quality of the portfolio and the level of interest and capacity in engaging this interdisciplinary program within a university environment. The faculty focus on working with our students to develop their own work and enabling them to leave the University with the tools to support a lifetime of art making. As part of this process, the department encourages students to explore not only the artistic issues pertinent to their work, but also the theoretical, social and historical issues that intersect and bracket it.

The MFA is a two-year program (six quarters), comprised of 18 courses. Many of these course credits are earned through the development of individual work in conversation with the faculty.

First and second year students work together to articulate their work and to sharpen their skills of critical thinking and writing. Students come to the program with diverse intellectual, cultural and artistic backgrounds and different art making practices. We all work together to articulate a common language with which to discuss and make art in this critical and supportive community.

As part of the MFA program, DOVA hosts a lively visiting artist program under the auspices of the Open Practice Committee (http://dova.uchicago.edu/open-practice-committee) (OPC). In addition The University of Chicago provides an enormously rich intellectual environment full of engaging lectures and workshops in all areas of study. Our students are often interested in events hosted by the Center for Gender Studies, the Center for the Study of Race, Politics, and Culture, the Mass Culture Studies Workshop, the Department of Cinema and Media Studies, and the Department of Art History. We also offer workshops that focus on professional and pedagogical issues, both in DOVA and in the Career and Placement Services Office, to assist students in preparing for a career in the arts.

Each year, DOVA supports a faculty led trip to visit museums and galleries outside of Chicago; past trips have included New York City and Beijing. Information about our recent trip to Beijing can be found here (http://www.uchicago.cn/2012/10/uchicago-mfa-students-tour-beijing-with-laura-letinsky-and-geof-oppenheimer).

#### Curriculum

MFA students register for 300 credits (three courses at 100 credits each) per quarter. A total of 1800 credits, or eighteen courses, is required for the degree.

The basic requirements for the MFA are listed below:

1. Graduate Studio Project (9 Courses / 900 Credit Hours)

Students receive course credit for time spent in their studio developing their work. As part of this requirement students will present work to faculty and students for critique regularly throughout the year. Students register for at least 100 credit hours of Graduate Studio Project (ARTV 40000) per quarter, and may register for up to 300 hours per quarter provided that they are on track for meeting their other course requirements (see Graduate Seminars and Electives).

#### 2. Graduate Seminars (3 Courses / 300 Credit Hours)

In order to provide a core of common intellectual experience, all students are required to take three quarters of the Graduate Seminar in Visual Arts (ARTV 39200) during their first year. The content of these seminars varies with instructors, but may focus on many different issues in contemporary theory and criticism.

#### 3. Electives (6 Courses / 600 Credit Hours)

Students are required to take six graduate-level electives. At least three of the six electives must originate in departments outside of DOVA.

#### 4. Thesis Presentation

In the fall quarter of the second year, each student will work with a committee of two faculty members who assist in the preparation of the thesis work. In the final quarter of the program each degree candidate presents studio work in an MFA exhibition. In addition to this exhibition, students will be expected to submit a short but focused written abstract of their work.

#### 5. Standards Of Performance

Each graduate student must maintain high standards of engagement and achievement in studio and academic performance, including evidence of substantial growth in their work.

For additional information, please email dova@uchicago.edu or visit our website. (http://dova.uchicago.edu)

#### HOW TO APPLY

The application process for admission and financial aid for all graduate programs in the Humanities is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online at: http://humanities.uchicago.edu/prospective/admissions.html. Additional information about financial aid and the admissions process can be found on the DOVA website (http://dova.uchicago.edu/graduate).

#### VISUAL ARTS COURSES

#### ARTV 31001. Figure Drawing: Trans/Figuration. 100 Units.

Figure drawing is an experience that engages us visually, physically, emotionally, and psychologically. This many-faceted relationship is examined through the use of a variety of traditional and experimental materials, set-ups, and drawing methods. Assignments and class critiques investigate different models of stylistic invention, ranging from realism to comic expression. This studio class includes readings, field trips, and class projects that address the human form as source for developing your own visual responses to related issues—such as identity, narrative, and social critique.

Instructor(s): K. Desjardins Terms Offered: Winter Prerequisite(s): ARTV 10100, 10200, or 10300

Equivalent Course(s): ARTV 21001

#### ARTV 31900. Color Theory and Practice. 100 Units.

This course will introduce students to practical aspects of color mixing and the visual impacts of specific color combinations through a series of studio exercises and projects. Conceptual and theoretical investigations into optics, the science of color, and psychological and symbolic effects will contribute to an overall understanding of color in relation to visual culture and perception.

Instructor(s): S. Wolniak Terms Offered: Winter Prerequisite(s): ARTV 10100, 10200, or 10300 Equivalent Course(s): ARTV 21900

#### ARTV 32000. Introduction to Sculpture. 100 Units.

This course introduces the fundamentals of sculptural practice. Building on the historical, aesthetic, and technical strategies of making and thinking about sculpture, students are directed toward the realization of 3D objects. Assignments are intended to explore materials and process so as to facilitate students' development of an idea to a completed object. Discussions and gallery visits help engender an understanding of sculpture within a societal and historical context. Visits to galleries required.

Instructor(s): G. Oppenheimer Terms Offered: Winter

Prerequisite(s): ARTV 10100, 10200, or 10300 Equivalent Course(s): ARTV 22200, TAPS 28448

#### ARTV 32200-32202. Introduction to Painting I-II.

This studio course introduces students to the fundamental elements of painting (its language and methodologies) as they learn how to initiate and develop an individualized investigation into subject matter and meaning. This course emphasizes group critiques and discussion. Courses taught concurrently.

#### ARTV 32200. Introduction to Painting I. 100 Units.

Instructor(s): D. Schutter, K. Desjardins Terms Offered: Autumn, Winter

Prerequisite(s): ARTV 10100, 10200, or 10300

#### ARTV 32202. Introduction to Painting II. 100 Units.

Instructor(s): D. Schutter, K. Desjardins Terms Offered: Autumn, Winter

Prerequisite(s): ARTV 10100, 10200, or 10300

Equivalent Course(s): ARTV 22002

#### ARTV 32202. Introduction to Painting II. 100 Units.

Instructor(s): D. Schutter, K. Desjardins Terms Offered: Autumn, Winter

Prerequisite(s): ARTV 10100, 10200, or 10300

Equivalent Course(s): ARTV 22002

#### ARTV 32305. Performing Tableware. 100 Units.

Performing Tableware takes the actions and objects of the table as a site of research. Through demonstrations, readings and production, tableware will be considered in the context of contemporary practices in design, sculpture, installation, and performance. Materially rooted in ceramics, this course gives students the opportunity to highlight, interrupt or subvert the patterns associated with sitting around table. Student will engage in the full range of ceramic processes in this course. Developing projects through a process of questioning behavior and the intimate functions of objects of the table, students will extend and challenge their material knowledge. The class will provide workshops on techniques grounded in the traditions of tableware including china painting, glaze decals, and demonstrations on mold-making for slipcasting multiple objects.

Instructor(s): A. Ginsburg Terms Offered: Autumn Prerequisite(s): ARTV 10100, 10200, or 10300

Equivalent Course(s): ARTV 22305

#### ARTV 32307. How to House a Kiln. 100 Units.

How best to design an outdoor kiln building adjacent to the Logan Center for the Arts? This course will be a design charrette. Students will explore the history and design of small spaces, the specific needs of a kiln building, and how to best facilitate a connection between a kiln building and the Logan Center. Taking into account ideas of the appendage, the axillary, and the outgrowth, this course will examine the long history of architecture and design as students work towards an end goal, producing four design plans to propose to the University of Chicago. Working both independently and in groups, student-driven design concepts will be researched, questioned, and developed into design proposals. An experimental hands-on approach, beginning with mind mapping, sketching, and diagrammatic representation will lead to scale modeling and include easily accessible digital 3-D software. Students will work across disciplines and skill sets, drawing on principles and techniques from the fields of art, design, engineering, material studies, and architecture through readings, independent research, and guest lecturers. Open to all students.

Instructor(s): A. Ginsburg Terms Offered: Spring Prerequisite(s): ARTV 10100, 10200, or 10300

#### ARTV 32500. Digital Imaging. 100 Units.

This studio course introduces fundamental tools and concepts used in the production of computer-mediated artwork. Instruction includes a survey of standard digital imaging software and hardware (i.e., Photoshop, scanners, storage, printing, etc), as well as exposure to more sophisticated methods. We also view and discuss the historical precedents and current practice of media art. Using input and output hardware, students complete conceptually driven projects emphasizing personal direction while gaining core digital knowledge.

Instructor(s): J. Salavon Terms Offered: Winter, Spring

Prerequisite(s): ARTV 10100, 10200, or 10300

Equivalent Course(s): ARTV 22500, CMST 28801, CMST 38801

#### ARTV 32502. Data and Algorithm in Art. 100 Units.

An introduction to the use of data sources and algorithmic methods in visual art, this course explores the aesthetic and theoretical possibilities of computational art-making. Focusing on the diverse and ever expanding global data-feed, we will craft custom software processes to create works investigating the visual transformation of information. Additionally, software programming may be deployed independently, without a connection to source material. While placing an emphasis on creating new work, we will also survey the history of this type of art practice.

Instructor(s): J. Salavon Terms Offered: Spring Prerequisite(s): ARTV 10100, 10200, or 10300

Note(s): No prior experience with programming is necessary.

Equivalent Course(s): ARTV 22502

#### ARTV 33804. Experimental Animation. 100 Units.

Individually directed video shorts will be produced in this intensive studio course. Experimental and improvised approaches to stop-animation and motion picture art will combine digital production and post-production with analog and material methods of picture making. Early and experimental cinema, puppetry and contemporary low-tech animation strategies will be presented as formal and technical examples.

Instructor(s): S. Wolniak Terms Offered: Autumn Prerequisite(s): ARTV 10100, 10200, or 10300

#### ARTV 33833. Improvisational Dramaturgy. 100 Units.

Team-taught by Catherine Sullivan and visiting composers Sean Griffin and George Lewis, Improvisational Dramaturgy explores interdisciplinary and improvisational strategies for performance. Course work will be integrated with the development of a staging of an operatic composition by Lewis. Tentatively titled "Afterword," the piece explores the ecology of Lewis's 2008 award-winning book, *A Power Stronger Than Itself: The A.A.C.M. and American Experimental Music.* Issues of public assembly, spatial language, music as social text, documentation, collaboration, and the dynamics of improvisation will be explored in theory, history, and practice. The class will work as an ensemble, contributing original material and working with various groups both on and off campus. Students working in all disciplines are welcome. This course is sponsored by a Mellon Fellowship for Arts Practice and Scholarship at the Gray Center for Arts and Inquiry.

Instructor(s): C. Sullivan, S. Griffin, G. Lewis Terms Offered: Spring Equivalent Course(s): ARTV 23833, CRES 23833, CRES 38333, MUSI 26114, MUSI 38214, TAPS 28429

#### ARTV 33849. Politics of the Moving Image: Form, Content, Context. 100 Units.

This course sifts the terrain of art and film history for political problematics and considers the issues relevant to the entry of moving image into the sphere of the fine arts: from the avant-garde's vision of a transformational Gesamtkunstwerk to the more practical negotiations of film versus video and installation versus screening. This production seminar is structured by a series of thematic screenings, discussions, and four substantial studio projects engaging higher level concepts central to the relationship between film and sculpture. Topics addressed range from montage, narrative, and apparatus to issues of labor, collective production, and exhibition design. Filmmakers and artists discussed may include Chris Marker, Peter Watkins, Anthony McCall, Diana Thater, and Mark Leckey.

Instructor(s): K. Pandian Terms Offered: Autumn Prerequisite(s): ARTV 10100, 10200, or 10300 Note(s): Attendance at screenings is mandatory

Equivalent Course(s): ARTV 23849

#### ARTV 33904. Senior Creative Thesis Workshop. 100 Units.

This seminar will focus on how to craft a creative thesis in film or video. Works-in-progress will be screened each week, and technical and structural issues relating to the work will be explored. The workshop will also develop the written portion of the creative thesis. The class is limited to seniors from CMS and DOVA, and MAPH students working on a creative thesis.

Instructor(s): J. Hoffman Terms Offered: Winter

Prerequisite(s): CMST 23930; CMST 23931; departmental approval of senior creative thesis project.

Equivalent Course(s): CMST 23904, ARTV 23904

#### ARTV 33905. Creative Thesis Workshop. 100 Units.

This seminar will focus on how to craft a creative thesis in film or video. Works-in-progress will be screened each week, and technical and structural issues relating to the work will be explored. The workshop will also develop the written portion of the creative thesis. The class is limited to seniors from CMS and DOVA, and MAPH students working on a creative thesis.

Instructor(s): Judy Hoffman Terms Offered: Autumn, Winter

Prerequisite(s): CMST 23930; CMST 23931 or 27600; departmental approval of senior creative thesis project.

Equivalent Course(s): CMST 33905,ARTV 23905

#### ARTV 33920. Drawing II: Exploded Drawing. 100 Units.

This intensive studio course will explore wide-ranging strategies in drawing and two-dimensional composition. Interrogating conventions of representation and pictorial space, students will develop new formal and conceptual possibilities that relate to the complexities and changing perspectives of contemporary life. Drawing will be addressed as an expansive, open-ended outlet for thought and action. Emphasis will be on innovation within the fundamental structures of the medium, including its history, materials, and techniques.

Instructor(s): S. Wolniak Terms Offered: Winter

Prerequisite(s): ARTV 10100, 10200, or 10300

Equivalent Course(s): ARTV 23920

#### ARTV 33931. Documentary Production II. 100 Units.

This course focuses on the shaping and crafting of a nonfiction video. Students are expected to write a treatment detailing their project. Production techniques focus on the handheld camera versus tripod, interviewing and microphone placement, and lighting for the interview. Postproduction covers editing techniques and distribution strategies. Students then screen final projects in a public space.

Instructor(s): J. Hoffman

Prerequisite(s): CMST 23930/ARTV 23930

Equivalent Course(s): CMST 23931, ARTV 23931, CMST 33931

#### ARTV 34000. Introduction to Black and White Film Photography. 100 Units.

Photography is a familiar medium due to its ubiquitous presence in our visual world, including popular culture and personal usage. In this class, students learn technical procedures and basic skills related to the 35mm camera, black and white film, and print development. They also begin to establish criteria for artistic expression. We investigate photography in relation to its historical and social context in order to more consciously engage the photograph's communicative and expressive possibilities. Course work culminates in a portfolio of works exemplary of the student's understanding of the medium. Field trips required.

Instructor(s): S. Huffman, L. Letinsky Terms Offered: Autumn, Winter

Prerequisite(s): ARTV 10100, 10200, or 10300

Note(s): Camera and light meter required.

Equivalent Course(s): ARTV 24000, CMST 27600, CMST 37600

#### ARTV 34130. The Production of the Artist. 100 Units.

This course will develop a conversation about what constitutes the image of the contemporary artist. Written exercises will contribute to the development of the problem of how one produces oneself as an artist. The history of dematerialization in art practice from the 1960's, and the discussion of globalization that emerged in the 1980's will be brought to bear. How is the role and identity of the artist constructed in relation to various histories and to the prevailing movements of the moment such as institutional critique and relational aesthetics? This course is open to students of all disciplines who are interested in how the artist is constructed, not only as role or identity, but as a production site.

Instructor(s): R. Basbaum Terms Offered: Autumn

Equivalent Course(s): LACS 24130, LACS 34130, ARTV 24130

#### ARTV 34201. Collage. 100 Units.

This studio course explores collage as a means for developing content and examining complex cultural and material relationships. Projects and assigned texts outline the history of collage as a dynamic art form with a strong political dimension, as well as critically addressing how it is being used today.

Instructor(s): S. Wolniak Terms Offered: Autumn Prerequisite(s): ARTV 10100, 10200, or 10300

Equivalent Course(s): ARTV 24201

#### ARTV 34301. Writing for Performance. 100 Units.

This course is an exploration of select texts for performance written by performance artists primarily but not entirely operating within the context of art. Via historical context and literary technique, students read, discuss, and analyze texts by various authors spanning the history of performance art: Hugo Ball, John Cage, Richard Foreman, Carolee Schneeman, Joseph Beuys, Karen Finley, Nature Theater of Oklahoma, John Leguizamo, and create and perform their own writing. Field trips and attendance at first class are required.

Instructor(s): W. Pope.L Terms Offered: Autumn Prerequisite(s): ARTV 10100, 10200, or 10300 Equivalent Course(s): ARTV 24301,TAPS 28414

#### ARTV 34401-34402. Photography I-II.

The goal of this course is to develop students' investigations and explorations in photography, building on beginning level experience and basic facility with this medium. Students pursue a line of artistic inquiry by participating in a process that involves experimentation, reading, gallery visits, critiques, and discussions, but mostly by producing images. Primary emphasis is placed upon the visual articulation of the ideas of students through their work, as well as the verbal expression of their ideas in class discussions, critiques, and artist's statements. As a vital component of articulating ideas and inquiry, students will refine their skills, e.g., black and white or color printing, medium or large format camera usage, or experimenting with light-sensitive materials. Courses taught concurrently and can be repeated as part of an ongoing, developing photographic project.

#### ARTV 34401. Photography I. 100 Units.

Instructor(s): L. Letinsky Terms Offered: Spring

Prerequisite(s): ARTV 10100, 10200, or 10300; and 24000.

Note(s): Camera and light meter required. Courses taught concurrently and can

be repeated as part of an ongoing, developing photographic project.

Equivalent Course(s): ARTV 24401, CMST 27602, CMST 37602

#### ARTV 34402. Photography II. 100 Units.

Instructor(s): L. Letinsky Terms Offered: Spring

Prerequisite(s): ARTV 10100, 10200, or 10300; and 24000.

Note(s): Camera and light meter required. Courses taught concurrently and can

be repeated as part of an ongoing, developing photographic project.

Equivalent Course(s): ARTV 24402, CMST 27702, CMST 37702

#### ARTV 34402. Photography II. 100 Units.

Instructor(s): L. Letinsky Terms Offered: Spring

Prerequisite(s): ARTV 10100, 10200, or 10300; and 24000.

Note(s): Camera and light meter required. Courses taught concurrently and can be repeated as part of an ongoing, developing photographic project.

Equivalent Course(s): ARTV 24402, CMST 27702, CMST 37702

#### ARTV 34550. Shopcraft: Methods and Materials. 100 Units.

Designed as a complementary course to the DOVA sculpture sequence, Shopcraft explores the tools and techniques available to students in the wood shop. Topics covered include shop safety; the properties of woods; the planning and material selection process for sculpture, furniture, and other woodworking applications; the care and use of hand tools; and interpreting and creating scale drawings and conceptual plans. A series of small projects designed to challenge and expand students' design, drafting, and woodworking skills are assigned. In addition, students are invited to incorporate projects from sculpture classes or their individual studio practice into the course.

Instructor(s): D. Wolf Terms Offered: Autumn Prerequisite(s): ARTV 10100, 10200, or 10300 Equivalent Course(s): ARTV 24550, TAPS 27900

#### ARTV 34701. Experimental Drawing: Multi-level Studio. 100 Units.

Open to all levels of experience. We will explore a wide range of materials and methods that link drawing practice to an array of ideas and historic artistic movements (for example: Renaissance anamorphic perspective; non-Western attitudes towards narration and space in scroll painting; concretization of conceptual thinking in Dada's Diagrams, to name a few...). The act of drawing will furthermore be considered a means of thinking and proceeding that affords us insight into the relationship between experimentation and invention common to all artistic endeavors. Class projects and critiques investigate this relationship, and will address how drawing can nurture your work in other media. This studio class is augmented by readings, field trips, and writing assignments.

Instructor(s): K. Desjardins Terms Offered: Spring

Prerequisite(s): ARTV 10100, 10200, or 10300

#### ARTV 34703. Mixed-Media Drawing: From Object to Concept. 100 Units.

An object of your choice will serve as a departure point for this process-oriented studio course that takes you through a sequenced exploration of a variety of mixed media drawing materials, methods, and approaches: from observation to abstraction—to the purely conceptual. Readings, critical writing, and discussion are intended to reinforce fluidity between theory, your ideas, and your art practice. This course is augmented by an image bank and gallery visits.

Instructor(s): K. Desjardins Terms Offered: Autumn

Prerequisite(s): ARTV 10100, 10200, or 10300 Note(s): Open to all levels of experience.

Equivalent Course(s): ARTV 24703

# ARTV 34709. The Death of Painting: Advanced Painting Studio/Seminar. 100 Units.

"From today, painting is dead!" exclaimed painter Paul Delaroche in 1839, upon encountering his first Daguerreotype. Since then, painting's authenticity and validity have continued to come into question. We will work with a series of studio projects designed to address the impact of technological innovation on the practice of painting. These projects serve as catalysts for discussion of the challenges and (well yes) experiential anxiety inherent in the contemporary discourse around the demise of painting. Expect a busy quarter of painting, discussion, and critique. Visiting artists, assigned readings, visits to museums and galleries augment this course.

Instructor(s): K. Desjardins Terms Offered: Spring

Prerequisite(s): ARTV 10100, 10200, or 10300 and ARTV 22000 or 22002

Equivalent Course(s): ARTV 24709

#### ARTV 35100. Nonfiction Film: Representations and Performance. 100 Units.

This course attempts to define nonfiction cinema by looking at the history of its major modes (e.g., documentary, essay, ethnographic, agitprop film), as well as personal/autobiographical and experimental works that are less easily classifiable. We explore some of the theoretical discourses that surround this most philosophical of film genres (e.g., ethics and politics of representation; shifting lines between fact and fiction, truth and reality). The relationship between the documentary and the state is examined in light of the genre's tendency to inform and instruct. We consider the tensions of filmmaking and the performative aspects in front of the lens, as well as the performance of the camera itself. Finally, we look at the ways in which distribution and television effect the production and content of nonfiction film. Instructor(s): J. Hoffman

Equivalent Course(s): CMST 28200,ARTV 25100,CMST 38200,HMRT 25101,HMRT 35101

#### ARTV 36214. On Art and Life. 100 Units.

This class is an multidisciplinary intensive into the ways in which artistic production is dependent on and part of larger cultural tropes. Utilizing contemporary culture as a framework, how does art form connective tissues with the worlds that happen outside of the artists studio? Visual art is a communicative form that requires subject matter and this class will investigate the myriad of ways that artists mine culturally meaningful materials, forms, and images as both subjects and as palette. Participation in several field trips and out-of-class film screenings is required. Reference materials are drawn from a variety of disciplines.

Instructor(s): G. Oppenheimer Terms Offered: Spring

Prerequisite(s): ARTV 10100, 10200, or 10300

Equivalent Course(s): ARTV 26214

# ARTV 36217. OPC Seminar 2014: Mental Space-Digressions in the Art of Contemporary Landscape. 100 Units.

This interdisciplinary course will examine the ways in which we can re-imagine of the genre of landscape to complicate our understanding of interiority and the external world. What does it means today to say, as Paul Cezanne put it, "The landscape thinks itself in me and I am its consciousness"? How can we think of the strange and un-budgeable mixture of landscape and consciousness as material to be worked with? Given the ever increasing virtualization of contemporary life, can we still breathe out-of-doors and touch the wildly complex sensorial phenomenon that was once un-problematically referred to simply as "Nature"? These are some of the key questions this course will explore through readings, visiting lecturers, film screenings, plein air painting, and other related activities. Texts will include writings by W. J. T. Mitchell, Robert Rosenblum, Henri Lefebrvre, Joseph Leo Koerner, Robert Smithson, Susan Hiller, and others.

Instructor(s): Z. Cahill Terms Offered: Spring Prerequisite(s): ARTV 10100, 10200 or 10300

Equivalent Course(s): ARTV 26217

#### ARTV 36300. Introduction to Stage Design. 100 Units.

This course explores the application of the visual and aural arts to the varied forms of design for the stage (i.e., scenic, lighting, costume, sound). We pay particular attention to the development of a cogent and well-reasoned analysis of text and an articulate use of the elements of design through a set of guided practical projects.

Instructor(s): T. Burch Terms Offered: Autumn

Note(s): Lab fee required. This course is offered in alternate years.

#### ARTV 36411. Movies and Madness. 100 Units.

We propose to investigate representations of madness in fictional, documentary, and experimental film. We divide the topic this way to emphasize the different dimensions of cinematic address to questions of mental illness, and the ways that film genres imply distinct formal and epistemological conventions for the representation of insanity. Documentary ranges from instructional and neutral reportage, to polemical, essayistic interventions in the politics of psychiatry and the asylum, the actual conditions of mental illness in real historical moments. Documentary also includes the tendency in new media for "the mad" to represent themselves in a variety of media. With experimental film, our aim will be to explore the ways that the cinematic medium can simulate experiences of mania, delirium, hallucination, obsession, depression, etc., inserting the spectator into the subject position of madness. We will explore the ways that film techniques such as shotmatching, voice-over, montage, and special effects of audio-visual manipulation function to convey dream sequences, altered states of consciousness, ideational or perceptual paradoxes, and extreme emotional states. Finally, narrative film we think of as potentially synthesizing these two strands of cinematic practice, weaving representations of actual, possible, or probable situations with the special effects of mad subjectivity. Our emphasis with narrative film will be to focus—not simply on the mentally ill subject as hero or monster—but on the institutional situation of madness, its place in a social and disciplinary context. Put simply, we want to consider films that portray both insanity and the sanatorium, both the deranged subject and the asylum, both the madwoman and the (often male) psychiatrist, both the irrational subject and the rational system. The overall aim of the seminar, then, is to raise the question of what movies bring to madness that was not representable in pre-cinematic media such as theater, opera, and literature, and what it was that the subject of madness brought to cinema, not only as a thematic issue but as defining possibility of film form as such. A more specific aim will be to establish a context for focusing on American Cold War movies, as well as more recent films that look back to the Cold War era, and films that directly address the anti-psychiatry movement of the 1960s. (H)

Instructor(s): W. J. T. Mitchell, J. Hoffman Terms Offered: Autumn

Prerequisite(s): Third- or fourth-year standing

Equivalent Course(s): BPRO 26400,ARTH 26905,ARTH 36905,ARTV 26411,CMST

25550,CMST 35550,ENGL 28703,ENGL 38703

#### ARTV 36500. History of International Cinema I: Silent Era. 100 Units.

This course introduces what was singular about the art and craft of silent film. Its general outline is chronological. We also discuss main national schools and international trends of filmmaking.

Instructor(s): J. Lastra Terms Offered: Autumn

Prerequisite(s): Prior or concurrent registration in CMST 10100 required. Required of students majoring in Cinema and Media Studies.

Note(s): This is the first part of a two-quarter course.

Equivalent Course(s): CMST 28500,ARTH 28500,ARTH 38500,ARTV 26500,CMLT 22400,CMLT 32400,CMST 48500,ENGL 29300,ENGL 48700,MAPH 36000

#### ARTV 36901. Picturing Words/Writing Images (Studio) 100 Units.

What is the relationship between reading and looking? Images in mind and images on paper—words in mind and on the page—we will explore the intersection of these different ways to think, read, and look, as we make poems, drawings, paintings, etc., in class. We will investigate the problem of representing language as it is expressed in the work produced in class. Studying works by contemporary visual artists like Jenny Holzer and Ann Hamilton, and practicing poets such as Susan Howe and Tom Phillips will inform our investigation. The course will feature visits to our studio by contemporary poets and visual artists, who will provide critiques of student work and discussion of their own ongoing projects. These visitors will help to frame our artistic and literary practice within the ongoing conversation between word and image in modern culture. We will ask, what are the cognitive, phenomenological, social, and aesthetic consequences of foregrounding the pictorial/visual aspect of alphabetical characters? (C, H)

Instructor(s): J. Stockholder, S. Reddy Terms Offered: Autumn

Prerequisite(s): Third- or fourth-year standing. Previous experience in an arts studio or creative writing course recommended, but not required.

Equivalent Course(s): BPRO 26500,ARTV 26901,CRWR 26341,CRWR 46341,ENGL 24319,ENGL 34319

#### ARTV 37200. Painting. 100 Units.

Presuming fundamental considerations, this studio course emphasizes the purposeful and sustained development of a student's visual investigation through painting, accentuating both invention and clarity of image. Requirements include group critiques and discussion.

Instructor(s): K. Desjardins, D. Schutter Terms Offered: Winter, Spring Prerequisite(s): ARTV 10100, 10200, or 10300; and 22000 or 22002

Equivalent Course(s): ARTV 27200

#### ARTV 37910. Drawing After 1953. 100 Units.

For course description contact Art History.

Equivalent Course(s): ARTH 27610, ARTH 37610, ARTV 27910

#### ARTV 38204. Political Documentary Film. 100 Units.

This course explores the political documentary film, its intersection with historical and cultural events, and its opposition to Hollywood and traditional media. We will examine various documentary modes of production, from films with a social message, to advocacy and activist film, to counter-media and agit-prop. We will also consider the relationship between the filmmaker, film subject and audience, and how political documentaries are disseminated and, most importantly, part of political struggle.

Instructor(s): J. Hoffman

Equivalent Course(s): CMST 28201, ARTV 28204, CMST 38201

#### ARTV 39200. Graduate Seminar: ARTV, 100 Units.

Instructor(s): D. Schutter, T. Gates Terms Offered: Autumn, Winter, Spring

#### ARTV 40000. Graduate Studio Project. var Units.

Terms Offered: Autumn, Winter, Spring

#### ARTV 55500. Race, Media and Visual Culture. 100 Units.

For course description contact CDIN Center for Disciplinary Innovation. Equivalent Course(s): CDIN 51300,ARTH 49309,CMLT 51500,CMST 51300,ENGL 51300



# THE DIVISION OF THE PHYSICAL SCIENCES

#### Dean

- Edward W. (Rocky) Kolb Dean of Students
- Miranda Swanson

The Division of the Physical Sciences includes the Departments of Astronomy & Astrophysics (http://astro.uchicago.edu), Chemistry (http://chemistry.uchicago.edu), Computer Science (http://www.cs.uchicago.edu), Geophysical Sciences (http://geosci.uchicago.edu), Mathematics (http://www.math.uchicago.edu), Physics (http://physics.uchicago.edu), and Statistics (http://www.stat.uchicago.edu). It also includes the Enrico Fermi Institute, the James Franck Institute, and the (interdivisional) Institute for Biophysical Dynamics. Graduate degrees are awarded only by the departments and the Biophysical Sciences (http://biophysics.uchicago.edu) program, but students in physical sciences programs often conduct their research under the auspices of the research institutes.

Undergraduate programs in the physical sciences are administered by the College. Detailed descriptions of programs leading to the bachelor's degree may be found in The College Catalog (http://collegecatalog.uchicago.edu).

# ADMISSION TO GRADUATE PROGRAMS IN THE DIVISION

Applicants for admission to graduate studies in a particular branch of the Physical Sciences should refer to individual department entries for specific admissions requirements.

An applicant who has received a bachelor's degree or the master's degree from an accredited college or university may be admitted on the basis of his or her previous academic record.

An applicant who has completed at least two years of college work with superior standing in the basic courses of a special field and an adequate record of general studies but who does not have a four year bachelor's degree may be admitted to the division to study toward a higher degree. However, failure to qualify for a higher degree leaves the student with no degree. Admission on this basis is recommended only for those with high aptitude for their major field and with not more than two deficiencies in general education covering the areas of English, modern foreign languages, humanities, social science, and biological science.

A person may be admitted as a graduate student at large or as a returning scholar for the purpose of studying a definite subject or subjects for which he or she has an adequate background. Admission is considered upon the basis of an abbreviated application, such credentials as may be appropriate, and a clearly defined statement

of objectives. Application is made to the Graham School of Continuing Liberal and Professional Studies (https://grahamschool.uchicago.edu).

#### FINANCIAL AID

Most graduate students at the doctoral level in the Division of the Physical Sciences receive some form of financial support. Almost all advanced students engaged in thesis research have research assistantships and receive stipends from the research sponsor's contract or grant. A merit tuition scholarship normally accompanies such assistantships. Since teaching experience is a requirement for the Ph.D. degree in all departments, many students, usually in their first and second years of graduate study, serve as teaching assistants in undergraduate courses offered by their departments. Other forms of support include fellowships provided by the National Science Foundation, the U.S. Department of Education, and various private foundations. The University provides a limited number of special scholarships and fellowships for outstanding students from its own student aid funds and from privately endowed funds.

#### DEGREES

Normally students admitted to a degree program are expected to be in continuous, full time residence until the degree has been conferred.

Since individual departmental degree requirements may change, students should always contact their department for current degree requirements and regulations.

#### MASTER OF SCIENCE

Master of Science students are required to register full time in the division for a minimum of three quarters, during which time they must satisfactorily complete a minimum of nine individual courses. There are several masters programs in the division for students who want to specialize in specific areas in the physical sciences:

The Department of Computer Science offers a Master of Science in Computer Science (http://csmasters.uchicago.edu).

The Physical Sciences Division together with the Harris School for Public Policy offers a Master of Science in Environmental Science and Policy (http://harrisschool.uchicago.edu/degrees/masters-degree/ms-env-sci-policy).

The Department of Mathematics offers a Master of Science in Financial Mathematics (http://www-finmath.uchicago.edu).

The Physical Sciences Division offers a general Master of Science in the Physical Sciences (http://psd.uchicago.edu/departments/ms-psd.shtml) aimed at students who wish to broaden or deepen their knowledge of the physical and mathematical sciences.

The Department of Statistics offers a Master of Science in Statistics (http://www.stat.uchicago.edu/admissions/master.shtml).

#### DOCTOR OF PHILOSOPHY

The degree of Doctor of Philosophy is conferred in recognition of high accomplishment and ability in the candidate's chosen field. It is understood that the completion of a specified number of courses and a given period of residence do not ensure the granting of this degree. The requirements for the degree of Doctor of Philosophy are as follows:

- 1. Completion of the University's residence requirements.
- 2. Admission to candidacy for the degree. Admission to advanced work in the division does not necessarily imply admission to candidacy for a degree, which is contingent upon the recommendation of the department in which the student is working. At the appropriate time departments will submit to the dean of students in the division, on behalf of each student, an application requesting approval of admission to candidacy. Approval of the application certifies that:
  - The candidate has begun investigation for a dissertation
  - The candidate's department recommends admission to candidacy (following satisfactory completion of individual examination requirements).
  - The candidate has satisfied any foreign language requirement of his or her department
- 3. The passing of final examination(s) in accordance with one of the following plans:
  - A basic examination in the major fields of interest in the department or departments of specialization and a final oral examination in the field covered by the dissertation, or
  - In the absence of a preliminary or basic examination, passing comprehensive examinations covering major fields of interest in the department of specialization, including the field of the dissertation.
- Acceptance by the department and the Dissertation Office of a dissertation submitted for the degree.



# Master of Science Program in Computer Science

The Department of Computer Science (http://www.cs.uchicago.edu) at the University of Chicago offers two graduate curricula in computer science:

- A graduate professional curriculum leading to the Master of Science (S.M.) degree, for students who wish to enter or advance themselves in computer science practice.
- 2. A graduate research curriculum leading to the Ph.D. degree that prepares students to perform advanced basic research in computer science either in industry or academia. Teaching experience is available for students preparing for academic careers. For more information on the Ph.D. program, please see the listing Department of Computer Science.

The Masters Program in Computer Science (http://csmasters.uchicago.edu) provides students a deep foundation in computer science and the skills required for an exciting career in software engineering, finance, trading analytics and more.

We offer a comprehensive and thorough process-oriented approach to software development. The curriculum is fundamentally grounded in software engineering research, theory, principles, and practice (e.g. CMMI, RUP, UML and design patterns), with a strong emphasis in applied topics with coursework databases, networking, systems administration, large-scale information systems, computer architecture, operating systems, electronic commerce, ethics, public policy, object architectures, multimedia systems, Web-based services, e-commerce, network security, and cryptography, as well as other topics important to computer professionals and their potential employers.

The Masters in Computer Science degree is designed for students whose primary interest is in transitioning into a technical role or continuing on their professional technical path. The skills acquired will enable advancement to positions and projects of greater responsibility and impact. Students will be equipped with a strong foundation and the necessary tools to utilize new technologies and prepare them for key technology application and decision-making.

We are able to accommodate working professionals and varying schedules, so the program may be taken on a full-time or part-time basis to best fit your needs. Our classes are held in the evening at the Hyde Park Campus and at the Gleacher Center in downtown Chicago.

Students must take a minimum of 9 courses to graduate which includes five core classes and four electives courses, with fulltime students able to complete the program in as little as 9 months and part-time students completing the program in as few as 15 months.

For course offerings and descriptions, please see the program's online course schedule. (https://csmasters.uchicago.edu/page/2013-2014-course-schedule-1)

Unlike other programs where a specific set of prerequisites is required for entry to the program, we realize some students may not have the computer science

background needed as a foundation for success in the program but plenty of relevant experience or expertise. To accommodate those with less experience in math and/or programming, we offer an Immersion Phase (http://csmasters.uchicago.edu/page/immersion-phase) to introduce students with limited previous exposure to computing to the fundamental and introductory skills that are needed to successfully begin the masters level coursework.

Graduates of our program are highly sought after and find positions with technology companies, software developers, algorithmic trading houses and consulting firms.

# COMPUTER SCIENCE - COMPUTER SCIENCE PROFESSIONAL PROGRAM COURSES

CSPP 50101. Concepts of Programming (Immersion Programming) 150 Units.

In this course students will get an introduction to the field of computer science by learning to program in Java. Students will write roughly two or three programs of significance each week to learn foundational programming principles and practices for writing clean, readable code, and learning how think and solve problems like a computer scientist. Along with basic principles like procedural abstraction, recursion, and handling input and output, an emphasis will be placed on theories and principles of Object Oriented software design, analyzing algorithms and choosing appropriate data structures to solve problems.

Instructor(s): TBA Terms Offered: Summer

Note(s): Only students of the program can register for this course

## CSPP 50103. Math for Computer Science: Discrete Math (Immersion Math) 100-150 Units.

This course is an introduction to ideas and techniques from discrete mathematics that are widely used in computer science. Topics include: propositional logic and quantifiers, proof methods (direct proof, proof by contradiction, case analysis, mathematical induction), basic number theory (GCD, Euclid's algorithm, prime factorization, modular arithmetic), summations and closed forms, growth of functions and asymptotic notation, basics of counting (permutations, combinations, binomial theorem, pigeonhole principle), recurrences and methods of solving linear recurrences, basic graph theory (connectedness, trees, bipartite graphs), discrete probability, conditional probability and independence, random variables, expected value, and variance. This course is prerequisite for courses in Algorithms, Databases, Networks, Systems, and Numerical Methods.

Instructor(s): Geraldine Brady Terms Offered: Summer; Winter

Prerequisite(s): recalculus, especially logarithms and exponentials, is a prerequisite; calculus is not required. There are no computer science prerequisites.

Note(s): Only students of the program can register for this course

#### CSPP 51025. Practicum in Trading Systems Development. 100 Units.

This is a course that gives students hands---on experience in the design and implementation of trading system platforms. The focus of the course will be on exchange processes and platforms that enable exchanges to do what they do best----- receive and match orders from customers and execute trades on behalf of customers.

This course is designed to give students hands---on implementation experience in designing and building a functioning trading system in C and C++ using state---of---the---art tools and environments. Students will work collaboratively in developing a trading system platform that implements the fundamental lifecycle of exchange communication: Order Receipt, Order Matching, Market Data Broadcast, Order Book Management Strategy, and Trade Notification. Broader ancillary topics pertaining to the larger lifecycles of equity markets including Straight Through Processing, Clearing and Settlement, Equity Arbitrage and Short---Term Algorithmic Trading will also be addressed.

For the implementation, we will focus on developing an exchange platform for the processing of equity trades. Students will learn how to implement the various exchange workflows including an Order---Matching Engine, Broadcast/ Multicast Engine, Security, Data Management, and STP Interoperability. The implementation will be on Linux/Unix and technical lectures will focus on fundamental enabling technologies including advanced signals, parent and child process management, with significant focus around advanced socket management including Multicast. UDP vs. TCP processing will be covered, along with Multithreading vs. Multiprocessing strategies, advanced issues in POSIX multithreading and synchronization, POSIX Interprocess Communication, and I/O multiplexing. Other topics relevant to trading system development will be discussed as needed and as time permits. DBMS support will be provided by Oracle 10g.

The course structure will be a combination of lecture and laboratory where students will implement a functioning (albeit primitive) equity exchange known as The University of Chicago Equities Exchange, or UCEE (pronounced "USee"), with a focus on trading equity shares.

Lectures will alternate between technical/capability instruction and guest lectures from leaders/experts in the trading industry, including guest lectures on workflows from exchange members, system developers, traders, and others directly involved in trading systems operations and execution on a day---to---day basis.

Students wishing to take this course should have programming experience in C or C++, along with experience using and developing software on a Unix platform. Trading experience or exposure is a definite plus but is not required.

Instructor(s): Mark Shacklette Terms Offered: Autumn

Prerequisite(s): Immersion Programming

#### CSPP 51030. iOS Application Development. 100 Units.

Advances in mobile technologies are changing the way that individuals and businesses use computing devices. This course will instruct students on the fundamentals of mobile application development using the iOS SDK. An introduction to object-oriented design using the model-view-controller pattern, memory management, Objective-C programming language will also be taught.

Using iOS APIs and tools, including Xcode, Interface Builder and Instruments, students will complete weekly programming assignments that will culminate in the development of a fully functioning iOS application. The course will also explore interface and application design considerations specific to mobile technologies. As a final project, each student will design and implement an application an application of their choice.

Instructor(s): T. Andrew Binkowski Terms Offered: Winter

Prerequisite(s): Immersion Programming

Note(s): Non-CSPP student must receive approval from program prior to registering.

#### CSPP 51031. Android Application Development. 100 Units.

After a quick introduction to mobile computing, competing platforms, Android architecture, market projections, and social and economic implications, we will dive directly into developing several reference implementations. Alternating between theory and practice, and progressing cumulatively, will will cover every major feature of the Android platform, including; audio, graphics, internet connectivity, wifi, mapping/geo-positioning, notifications, sms, structured feeds, persistence, threads, states, and inter-process communication, among others. Students will chose a final project, then envision, design, develop, test, and deploy an application to the Android marketplace.

Instructor(s): Adam Gerber Terms Offered: Summer

Prerequisite(s): 50101 from Summer 2012 or 51036 or equivalent experience programming in Java

#### CSPP 51032. Advanced iOS Application Development. 100 Units.

Advances in mobile technologies are changing the way that individuals and businesses use computing devices. This course will explore real-world issues with developing robust, high-performance iOS applications for iPhone, iPod Touch and iPad. The course will consist of lectures, hands-on coding exercises and discussion. Weekly programming assignments will be used to create a portfolio of applications using advanced iOS APIs and tools, such as Xcode, Interface Builder and Instruments.

Throughout the course, students will design and develop an application as a final project. Students may opt to work in collaboration with local companies or emerging start-ups for their project. These opportunities will be discussed during the first week of class and may vary by quarter.

Each student will also be required to present a case study featuring a open source iOS framework, componment or library. The studies will describe and review their utility and implementation details of the source code. These case studies are designed to broaden students exposure to best practices in iOS development.

Instructor(s): T. Andrew Binkowski Terms Offered: Spring

Prerequisite(s): CSPP 51030 or instructor's consent

Note(s): Non-CSPP student must receive approval from program prior to registering.

#### CSPP 51036. Java Programming. 100 Units.

This is a fast-paced first course in Java for students with some prior programming experience, though not necessarily in an object-oriented language. A strong emphasis will be placed on understanding basic fundamentals of OO design -- inheritance, polymorphism, composition, etc. In the latter half of the course more advanced OO design patterns will be studied in the context of certain Java libraries (e.g. Swing). However, the main focus will be on the core language rather than any of java's high-level functionality. Coursework will center around a fairly involved weekly or bi-weekly homework assignment. There will also be an in-class, conceptual final exam.

Instructor(s): Adam Gerber Terms Offered: Autumn

Prerequisite(s): Immersion Programming

#### CSPP 51037. Advanced Java Programming. 100 Units.

This is an advanced course designed for students with a good foundation in Java programming. Basic familiarity with C is also assumed. The course focuses on designing distributed, multithreaded applications with the Java platform. It is an application programming course. Emphasis is placed on applying technology rather than studying API design and implementation. Topics proceed (roughly) from "low-level" to high level network programming concepts: socket byte streams, object serialization, Remote Method Invocation, Java/CORBA (minimal), Web Services, and (briefly) Enterprise Java Beans. While any of these topics alone could form the basis for an entire course, the emphasis is on providing students with an adequate foundation for pursuing individual topics in greater depth. Along the same lines, a major focus of the course is to help students determine when to best apply a given Java technology in a real world, multi-tier application.

Instructor(s): Andrew Siegel Terms Offered: Summer

Prerequisite(s): CSPP 51036 Java Programming or instructor's consent Note(s): Non-CSPP student must receive approval from program prior to registering.

#### CSPP 51040. C Programming. 100 Units.

This is an accelerated introduction to the C (not C++) Programming Language designed for students with prior programming experience. C is in many ways the lingua franca of computing, and a broad range of programming languages and related technologies derive from the basic principles of C memory management, control flow, and abstraction. Though there are many subtleties, C is not a big language, and it is expected that students will leave the course with a relatively deep understanding of the key concepts, which will then form a solid foundation for studying higher-level technologies. At the same time, C itself remains a very practical language, particularly so in areas such as scientific programming, high-performance computing, application level library design, systems programming, network programming, multi-threaded programming, etc. Students who successfully complete the course will be well prepared for subsequent CSPP courses in these areas. The course studies both fundamental and advanced C language constructs in the abstract and reinforces them through a range of exercies in the design of basic and advanced data structures, rudiemntary algorithms, and API design.

Instructor(s): Andrew Siegel Terms Offered: Autumn

Prerequisite(s): Immersion Programming

Note(s): Non-CSPP student must receive approval from program prior to

registering.

#### CSPP 51044. C/C++ for Advanced Programmers. 100 Units.

This course is an accelerated introduction to C++. The goal is a much more thorough-going understanding of C++ than is obtained through a traditional introductory language course. We also provide a heavy emphasis on C++ best practices and the reasons behind them. The course begins by covering core C++ language concepts such as constructors, polymorphism, memory management, and the STL. After that, we look deeply at powerful template techniques that distinguish C++ from other popular languages. We then cover essential C++ idioms and libraries such as RAII, internationalization, multithreading, customizing I/O streams and other topics of interest.

Experience in C or C++ is nice but definitely not required. However, it is expected that the student is already comfortable with some programming language.

Instructor(s): Michael Spertus Terms Offered: Winter

Prerequisite(s): 51036 or 51040 or programming experience in any language with instructor's consent

Note(s): Non-CSPP student must receive approval from program prior to registering.

#### CSPP 51045. Advanced C++ 100 Units.

This course is a continuation of CSPP 51044, in which we dive deeper into advanced C++ techniques and constructs, including functors, binders, type traits, and cacheaware programming. The second half of the course develops an extended look at using template metaprograms to implement common Design Patterns, allowing programs to achieve dramatically higher performance while at the same time increasing abstraction and maintainability.

Instructor(s): Michael Spertus Terms Offered: Spring

Prerequisite(s): 51044 or instructor's consent

## CSPP 51050. OO Architecture: Patterns, Technologies, Implementations. 100 Units.

This course gives hands-on experience in object oriented architecture and design and the understanding of such designs in the form of patterns. There are no formal prerequisites except basic familiarity with one object-oriented programming language, such as Java, C# or C++.

The course is designed to give students a solid introduction to software patterns as they are implemented in large scale system architectures currently in industry, as well as the opportunity to play with various languages in implementing these patterns. Students will be encouraged to explore various implementation possibilities afforded by these patterns. Trade-offs in performance, development time and maintenance impact, to name a few, will be discussed.

This course has two different foci -- language and design.

The design focus concentrates on several different design and architectural patterns or styles, including pipes and filters, message queues, the blackboard pattern, the broker pattern, model-view-controller, reflection, bridge, adapter, visitor, iterator, singleton, and composite. Refactoring concepts (improvement of code and design after the fact) will also be covered. Historical antecedents of these patterns will be reviewed in order to give students a fundamental grounding in such concepts.

The language focus allows students to gain additional acquaintance with various OO languages by implementing patterns during labs in the language of their choice (e.g., Java, C++, C#, Smalltalk, CLOS). Students should come into this class with a basic knowledge of one object-oriented language such as Java, C++ or C#. Familiarity with an additional object-oriented language, or knowledge of C, Smalltalk, and/ or Lisp, will be helpful but is not required. Language tutorials will be arranged for students interested in exploring a given pattern implementation with a particular language. Students will choose to implement a series of simple systems that incorporate several of these patterns. Students will be able to work with industry standard technologies such as IBM WebSphere MQ, Java J2EE, and CORBA in implementing their systems. Tradeoffs in various implementation languages will be discussed to help students determine the various strengths and weaknesses of individual language implementations.

Labs will reinforce lectures and help students implement each pattern covered. Students will be able to choose which language in which they wish to work for a given lab.

Instructor(s): Mark Shacklette Terms Offered: Spring

Prerequisite(s): Basic familiarity with one object-oriented programming language, such as Java, C# or C++.

#### CSPP 51081. Unix Systems Programming. 100 Units.

This is a systems programming course which explores topics in systems programming on Unix. Topics to be covered in detail will include:

- \*Unix History and Philosophy
- \*Awk Programming
- \*Unix File I/O
- \*Static and Shared Libraries
- \*Processes and Signals (fork, exec, etc.)
- \*Pipes (unnamed and FIFOs)
- \*System V IPC (semaphores, message queues, shared memory)
- \*Berkeley Socket programming
- \*Sun RPC
- \*POSIX pThread programming

Various tools used in developing software in C on Unix will be covered, including gcc, gdb, ddd, gprof, cvs, etc.

Because this is a programming course, students will be expected to know the C programming language upon course entry.

Instructor(s): Mark Shacklette Terms Offered: Winter

Prerequisite(s): 51040 C Programming and Unix Bootcamp

#### CSPP 51083. Cloud Computing. 100 Units.

An introduction to cloud computing for software developers, providing an entry point to the diverse and evolving set of services and technologies that constitutes the cloud. The course explains the key perspectives of software, platform and infrastructure as services, but gives most attention to how software development teams can leverage platform and infrastructure services to deliver their products. We'll make extensive use of services from Amazon (AWS) for computation (EC2), storage (e.g., S3, EBS, SimpleDB), integration (e.g., Simple Queue Service, Simple Notification Service) and management of applications. Although not a course in parallel computing or big data, we will discuss Hadoop/MapReduce from a service consumer perspective. Non-AWS services may be addressed, but for consistency and simplicity we'll try to keep hands-on IaaS work inside the AWS stack.

A briefer introduction to SaaS and other PaaS offerings will be provided, with a focus on services that a software team might consume.

The course includes a solid strategic consideration of the cloud, including an overview of the field and focused discussions about cloud security, economics, architecture, and adoption. The tactical side of the course includes programming assignments – most likely in Ruby (Ruby on Rails) or Python; possibly some Java – to make use of the services covered in class.

The service offerings in the cloud continue to evolve; the course will be updated as necessary.

Instructor(s): Peter Vassilatos Terms Offered: Spring

Prerequisite(s): Immersion

Note(s): Non-CSPP student must receive approval from program prior to

registering.

# CSPP 51087. High Performance Computing (formally Applied Parallel Programming) 100 Units.

Parallel computing allows multiple processing units to work together simultaneously on a common task. For certain types of applications, parallelization can increase execution time in proportion to the number of computers or processors used. This is a huge advantage for applications which have performance and/ or memory bottlenecks, such as one typically encounters in financial modelling, physics, engineering, or other applied science domains. This is a fast-paced applied programming course aimed at students with significant development experience in either C, C++, or FORTRAN (Java, Matlab, or Python are also possible, but not ideal). No prior knowledge of parallel computing is assumed. Students should, however, have both an interest and some previous experience in either algorithmic development, numerical methods, applied mathematics, or perhaps any physics or engineering-type discipline. A brief overview of parallel computing will be presented at the outset, but the course will be less on overview of HPC architectures and much more a focus on algorithmic implementation and performance tuning. The goal of the course it to give students experience in developing efficient, scalable (distributed memory) parallel algorithms appropriate for any system running an implementation of the Message Passing Interface (MPI). Assignments will be designed with some flexibility to allow students to explore applying parallel techniques to applications in their own field of interest.

Instructor(s): Andrew Siegel Terms Offered: Winter

Prerequisite(s): CSPP 51040 C Programming

Note(s): Non-CSPP student must receive approval from program prior to registering.

#### CSPP 51200. Introduction to Software Engineering. 100 Units.

Course description unavailable, please refer to the program's course schedule website (https://csmasters.uchicago.edu/page/2013-2014-course-schedule-1).

Instructor(s): Peter Vassilatos Terms Offered: Autumn

Prerequisite(s): Immerison

Note(s): Non-CSPP student must receive approval from program prior to registering.

#### CSPP 52011. Introduction to Computer Systems. 100 Units.

This course covers computer system organization, including machine and assembly language concepts, data representation, and the management of data and control flow in a computer. Familiarity with computer programming is assumed. Through this course, students will gain an understanding of computer architecture concepts, exposure to current trends in computer systems, and an understanding of machine capabilities that can be used to program more effectively. Good knowledge of computer architecture is a prerequisite for many advanced courses including compilers, parallel computing, and operating systems.

Instructor(s): Martha Billingsley Terms Offered: Winter

Prerequisite(s): Immersion

#### CSPP 52030. Operating Systems. 100 Units.

This course is an introductory course on operating systems. Students will learn the fundamentals of how modern operating systems are built, from the interface with hardware up through the kernel-userspace boundary. Important topics include the relationship between processes and threads, synchronization, inter-process communication, memory management, file systems, scheduling, and I/O. These concepts will be reinforced through several large-scale programming projects, whereby students will implement various sub-components of a real operating system. Prior experience with C and/or C++ required. As time permits, we will also delve into current hot topics in the field (such as multi-core systems, security, and cluster/grid computing).

Instructor(s): Anthony Nicholson Terms Offered: Spring Prerequisite(s): CSPP 51040 or 51044 or instructor's consent Note(s): Non-CSPP student must receive approval from program prior to registering.

#### CSPP 52553. Web Development. 100 Units.

Course description unavailable. Please refer to the program's course schedule website (https://csmasters.uchicago.edu/page/2013-2014-course-schedule-1).

Instructor(s): Jeffrey L Cohen Terms Offered: Winter

Prerequisite(s): Immersion

Note(s): Non-CSPP student must receive approval from program prior to registering.

#### CSPP 52554. Advanced Web Development. 100 Units.

Course description unavailable, please refer to the program's course schedule website (https://csmasters.uchicago.edu/page/2013-2014-course-schedule-1).

Instructor(s): Jeffrey L Cohen Terms Offered: Spring

Prerequisite(s): CSPP 52553 Web Development

#### CSPP 53001. Databases. 100 Units.

This is the first course in the databases sequence for the professional program. The objective of the course is to introduce you to the principles and techniques of relational databases. The course focuses on three broad topics: modeling, implementation, and operation environment.

A decent review of databases shall cover the following topics. Conceptual modeling an essential methodology of abstraction that enables database architects to produce powerful, cohesive, and robust database architectures. The prevailing technique for conceptual modeling is the ERD (Entity Relationship Diagram). The following topics are critical: entity as a set of things that are being tracked by the database; entity key as a unique identifier for each member of the entity; the m-m relationship; the 1-m relationship as a partial m-m; relationship cardinalities and participation role (optional v. mandatory); translation rules (from conceptual modeling to relational table definitions). SQL the universal standard of query language for relational databases. Concepts that fall under this topic include: relational algebra and calculus; subqueries; joins; database housekeeping (create table; insert into; delete; etc) Transaction processing A dicussion on how multiuser, distributed database systems work. The discussion covers: transaction commits; ACID; logs; locking; two-phase locking; etc. Integration This topic addresses the integration of relational database management systems with application platforms and frameworks. The objective of the discussion is to provide students with skills to build database-backended web applications. Emerging directions a discussion on XML and its mapping to relational models, OLAP, semistructured data sets, etc.

Instructor(s): Svetlozar Nestorov Terms Offered: Various

Prerequisite(s): Immersion

Note(s): Non-CSPP student must receive approval from program prior to registering.

#### CSPP 53013. Big Data. 100 Units.

Course description unavailable, please refer to the program's course schedule website (https://csmasters.uchicago.edu/page/2013-2014-course-schedule-1).

Instructor(s): Michael Spertus Terms Offered: Autumn

Prerequisite(s): CSPP 53001

#### CSPP 53017. Data Warehousing. 100 Units.

Data warehouses enable efficient and effective decision making in today's organizations by providing real-time business intelligence that analyzes vast amount of current and historical data from a variety of sources. This data must be captured, integrated, cleansed, organized, and put into context in order for it to translate into valuable information. This course examines how data warehouses are designed, how data is transformed and how managers and analysts can successfully gather, structure, analyze, understand and act on the information stored in data warehouses. The components and design issues related to data warehouses and business intelligence techniques for extracting meaningful information from data warehouses are emphasized. Various software tools will be used to demonstrate design, implementation, and utilization of data warehouses. Issues related to ethical and socially responsible use of data warehousing and business intelligence will also be discussed.

Instructor(s): Svetlozar Nestorov Terms Offered: Winter

Prerequisite(s): CSPP 53001 or instructor's consent

Note(s): Non-CSPP student must receive approval from program prior to registering.

#### CSPP 53800. Game Construction. 100 Units.

Computer games are one of the most exciting applications of computer technology. They also are large software systems that embody cutting-edge graphics, as well as techniques from AI, scientific simulation, networking, and databases. This course introduces the student to the basic algorithms and techniques used in computergame construction. Students work in teams to design and create games using existing libraries for graphics, physics simulation, and so forth.

Instructor(s): J. Reppy Terms Offered: Spring. Generally offered alternate years. Prerequisite(s): CMSC 15400, and at least two of the following courses: CMSC 23700, CMSC 23000, CMSC 23300, CMSC 23500. Strong background in programming and expertise in at least two technical areas underlying computer games (e.g., AI, graphics, scientific computing, networking).

Equivalent Course(s): CMSC 23800

#### CSPP 54001. Networks. 100 Units.

Broadly, this course will focus on the history, theory and implementation of computer networks. We will discuss the low-level technologies that move bits around (such as Ethernet and WiFi), the high-level applications that are part of our everyday 21st-century lives (such as email, the Web, and mobile phones), and everything in between (security, TCP/IP). At the completion of this quarter, you will (or should!) be able to explain, in detail, how data makes it way around the Internet when you click on a web link, how you can drive around at 80 MPH talking on a cell phone without the call dropping, how you can make a streaming video call over a lossy wireless link without frame dropping or jitter. In short, we'll pull back the curtain on what can be a somewhat mysterious and magical part of working with computers.

Instructor(s): Anthony Nicholson Terms Offered: Winter

Prerequisite(s): Immersion

Note(s): Non-CSPP student must receive approval from program prior to registering.

#### CSPP 54015. Advanced Network Design. 100 Units.

Advanced Network Design is a relatively new interdisciplinary class which is designed to give the CSPP graduate the skills they need to architect, build and manage the next generation networks capable of supporting multimedia technologies such as Voice over IP, desktop video conferencing, presence management and other specialized real-time applications. While the TCP/ IP protocol has been refined for the last 25 years to do a good job of reliably transmitting email and data files, real-time applications, such as voice over IP, put higher quality of service demands on networks than email and web sites. The operation of such multimedia applications on clean laboratory networks is fairly well understood; implementing them on large multi-use production networks is more difficult.

To achieve this goal, this course will pull material from different Computer Science disciplines:. Information on packet classification, quality of service delivery and reservation protocols typical of an advanced course on router design will be presented. Multimedia theory and practice, especially with regard to voice over IP, will be covered including real time protocols, compression and multicasting technology. Information on improving end-node network performance and security typical of an advanced systems class, will also be discussed. Finally, we will discuss network reliability, redundancy and high availability architectures.

There will be several written homeworks in the beginning of the class, followed by a major project which may be programming oriented or a network design, test and measure project. There will also be a midterm and final exam.

Instructor(s): Todd Nugent Terms Offered: Spring

Prerequisite(s): CSPP 54001 or CS 233 or CS 333 or instructor's consent Note(s): Non-CSPP student must receive approval from program prior to registering.

#### CSPP 55001. Algorithms. 100 Units.

This course is an introduction to the design and analysis of efficient algorithms. Topics include basic algorithm design techniques such as divide-and-conquer methods, dynamic programming, greedy choice, and graph searching. Sorting and searching algorithms are studied, as well as graph algorithms such as graph search, minimal spanning trees, and shortest paths.

Instructor(s): Geradline Brady Terms Offered: Various

Prerequisite(s): Immersion Math

Note(s): Non-CSPP student must receive approval from program prior to registering.

#### CSPP 55005. Advanced Algorithms. 100 Units.

This course is a sequel to CSPP 55001, an introductory course on the design and analysis of efficient algorithms. This course introduces students to advanced techniques for designing and analyzing algorithms, and explores their use in a variety of problem areas. Emphasis is placed on fundamental algorithms and techniques of algorithm design.

Instructor(s): Geraldine Brady & Janos Simon Terms Offered: Winter

Prerequisite(s): B or better in CSPP 55001 Algorithms

Note(s): Non-CSPP student must receive approval from program prior to registering.

#### CSPP 56510. Information Technology (IT) Security. 100 Units.

The objective of this course is to provide a basic understanding of Information Technology security – and to build an understanding of the elements that should be in place for an IT environment to achieve an adequate security level. We will begin with a general overview of IT security and introduce a framework for addressing security needs across an enterprise. Major security objectives and mechanisms for attaining these objectives will be discussed, including cryptography, authentication systems, Public Key Infrastructure, and platform and network security mechanisms. This course will give an overview of the technical details involved in the platform and network levels of security. We will look at common TCP/IP applications and discuss their security vulnerabilities. The course material will be presented in a framework of understanding business risks and how to address them. Students in this course will use the Unix operating system as a basis of learning host security mechanisms and should have a basic familiarity with Unix as a prerequisite. Students should also be familiar with TCP/IP networks. Students will be installing, configuring and running security tools obtained from the Internet as a part of their classwork. There will be a great deal of reading in this course. Students should have the ability to read and write in clear prose. Students in this course will be writing an in-depth paper or a project and should have the ability to write a substantial paper. Instructor(s): Arelene Yetnikoff Terms Offered: Spring

Prerequisite(s): Immersion

#### CSPP 56513. Digital Forensics. 100 Units.

In this course we will cover processes for investigations and evidence handling, types of evidence available, tools used in forensic investigations, recovery and preservation of data, and other forensic processes used in system incident response. We will use hands-on approaches with a number of tools and document results. Digital Forensics is a field of technology encompassing the investigation of digital devices as a part of incident response or data recovery. Forensic processes are used to recover evidence, determine the nature of an incident, puzzle together how the incident occurred and prepare evidence for potential court examination. In the Internet world of constant attacks, forensics have become an integral part of an incident response capability - to determine the nature of the attack, prepare evidence for further prosecution, if possible and to prevent future attacks. In this course we will cover processes for investigations and evidence handling, types of evidence available, tools used in forensic investigations, recovery and preservation of data, and other forensic processes used in system incident response. We will use hands-on approaches with a number of tools and document results. Prerequisites: Good understanding of computer systems and architectures. CSPP 52011 - Introduction to Computer Systems meets this prerequisite. Other core Systems courses may be used to meet this prerequisite with instructor's consent. Instructor(s): Arlene Yetnikoff & Todd Nugent Terms Offered: Summer Prerequisite(s): CSPP 52011 or instructor's consent Note(s): Non-CSPP student must receive approval from program prior to registering.

#### CSPP 58001. Numerical Methods. 100 Units.

This is a practical programming course focused on the basic theory and efficient implementation of a broad sampling of common numerical methods. Each topic will be introduced conceptually followed by detailed exercises focused on both prototyping (using matlab) and programming the key foundational algorithms efficiently on modern (serial) architectures. The ideal student in this course would have a strong interest in the use of computer modeling as predictive tool in a range of discplines -- for example risk management, optimized engineering design, safety analysis, etc. The numerical methods studied in this course underlie the modeling and simulation of a huge range of physical and social phenomena, and are being put to increasing use to an increasing extent in industrial applications. After successfully completing this course, a student should have the necessary foundation to quickly gain expertise in any application-specific area of computer modeling. A familiarity with or strong interest in basic concepts of calculus and linear algebra will be helpful.

Instructor(s): Andrew Siegel Terms Offered: Spring

Prerequisite(s): Immersion Math

Note(s): Non-CSPP student must receive approval from program prior to registering.



# MASTER OF SCIENCE PROGRAM IN FINANCIAL MATHEMATICS

The Department of Mathematics (http://www.math.uchicago.edu/graduate) offers a separate Master of Science in Financial Mathematics degree. The Financial Mathematics Program (http://www-finmath.uchicago.edu) is designed to produce graduates with a good understanding of the theoretical background of pricing models for financial derivatives, but more importantly a real understanding of the underlying assumptions and an ability to critically ascertain the applicability and limitations of the various models. A significant part of the program will be taught by professionals from the financial industry and will be devoted to examining how models behave in practice under a variety of market conditions, to examine how realistic the underlying assumptions are and to understand what happens when these assumption are violated. Students will learn to use the models to set up hedges and to evaluate the effectiveness of these hedges by simulating various market conditions.

The program consists of four components: Mathematics, Probability Theory, Economics, and Financial Applications and Simulations. In addition, there is a computing for Finance component for students who do not pass a computer programming placement exam.

The Mathematics component runs over three quarters, Probability Theory runs over two quarters and Economics over one quarter. The Financial Applications and Simulations is a three quarter component. Courses in each component meet for three hours per week for a total of nine hours of instruction per week. The Computing for Finance sequence meets for three hours per week for three quarters, raising the total to twelve hours of instruction per week for those students of whom it is required.

The contents and curriculum for the program has been worked out jointly by faculty members at the University and by practitioners in the field to insure the relevance of the material. The teaching of the program relies heavily on the use of computer simulations to illustrate the material. This both makes it possible to cover more material and teaches students to implement the theory at every stage.

Various software packages are licensed to the program and will be provided free of charge for the course work. Course material and assignments will be available and submitted on line.

The program has a three quarter-course requirement for obtaining the Master of Science degree. The program is structured to allow part-time enrollment to complete the program over two or three years. The courses will be taught evenings at the main campus of the University located in Hyde Park.

The requirements for acceptance to the program are a solid undergraduate background in mathematics, ideally a major in mathematics or science/engineering, with some background also in probability theory. Some experience in C/C++ programming will also be useful. Persons with practical experience in the financial

industry but with less of a mathematical background will be considered but may be required to acquire additional skills in mathematics.

The courses listed below may change and/or be revised each year. In addition, those who do not pass the computer programming placement exam are required to take and pass the Computing for Finance sequence. Here are the current, required courses for the degree:

FINM 33000	Mathematical Foundations of Option Pricing	100
FINM 33400	Statistical Risk Management	100
FINM 36700	Portfolio Theory and Risk Management I	050
FINM 33603	Fixed Income Derivatives I	050
FINM 34500	Stochastic Calculus	100
FINM 33150	Regression Analysis & Quantitative Trading Strategies	100
FINM 33604	Fixed Income Derivatives II	050
FINM 37300	Foreign Exchange/Fixed Income Derivatives	050
FINM 32000	Numerical Methods	100
FINM 35000	Topics in Economics	100
FINM 37400	Advanced Option Pricing	050
FINM 36702	Portfolio Theory and Risk Management II	050

#### MATHEMATICS - FINANCIAL MATHEMATICS COURSES

#### FINM 32000. Numerical Methods. 100 Units.

Implementing the theory introduced in FINM 33000, this course takes a numerical/computational approach to the pricing and hedging of financial derivatives. Topics include: Trees as diffusion approximations; Finite difference methods for PDE solution; Monte Carlo methods for simulation; Fourier transform methods for pricing.

Instructor(s): R. Lee Terms Offered: Spring

#### FINM 32200. Computing for Finance I. 100 Units.

As the first course in a three-part series, no previous programming knowledge is assumed. In Computing for Finance I, we will introduce the syntax and semantics of C++ and basics of OO programming. As part of the course work, students will develop an OO option pricer using the Monte Carlo technique. Classes are taught using a combination of lectures and in class hands-on lab sessions.

Instructor(s): C. Liyanaarachchi Terms Offered: Autumn

#### FINM 32300. Computing for Finance II. 100 Units.

We will discuss new programming techniques, including more OO features and Templates in C++. We will also examine the use of the Standard Library in C++. Students will extend the option pricer to use Tree methods. Classes are taught using a combination of lectures and in class hands-on lab sessions.

Instructor(s): C. Liyanaarachchi Terms Offered: Winter

#### FINM 32400. Computing for Finance III. 100 Units.

We will discuss topics relevant to implementing a basic electronic trading system using programming techniques covered in Part 1 and Part 2 of this course series. Topics discussed include the implementation of a trading algorithm, handling the connectivity to an exchange/brokerage house and issues related to performance. Different design choices and tradeoffs between those different choices; concurrent and parallel programming will be discussed within the context of this project. Classes are taught using a combination of lectures and in class hands-on lab sessions.

Instructor(s): C. Liyanaarachchi Terms Offered: Spring

#### FINM 33000. Mathematical Foundations of Option Pricing. 100 Units.

Introduction to the theory of arbitrage-free pricing and hedging of financial derivatives. Topics include: Arbitrage; Fundamental theorems of asset pricing; Binomial and other discrete models; Black-Scholes and other continuous-time Gaussian models in one-dimensional and multidimensional settings; PDE and martingale methods; Change of numeraire.

Instructor(s): R. Lee Terms Offered: Autumn

### FINM 33150. Regression Analysis & Quantitative Trading Strategies. 100 Units.

The course covers Linear and Non-linear Regression methods for estimating parameters of models. We will cover topics like Method of Moments, Generalized Linear Regression, Gauss-Newton Regression, Instruments, Generalized method of Moments. These methods will be used to develop factor models for securities returns.

Instructor(s): B. Boonstra Terms Offered: Winter

#### FINM 33170. Statistics of High-Frequency Financial Data. 100 Units.

This course is an introduction to the econometric analysis of high-frequency financial data. This is where the stochastic models of quantitative finance meet the reality of how the process really evolves. The course is focused on the statistical theory of how to connect the two, but there will also be some data analysis. With some additional statistical background (which can be acquired after the course), the participants will be able to read articles in the area. The statistical theory is longitudinal, and it thus complements cross-sectional calibration methods (implied volatility, etc.). The course also discusses volatility clustering and market microstructure.

Terms Offered: Spring

Prerequisite(s): STAT 39000/FINM 34500, also some statistics/econometrics background as in STAT 24400–24500, or FINM 33150 and FINM 33400, or equivalent, or consent of instructor.

Equivalent Course(s): STAT 33970

## FINM 33400. Statistical Risk Management. 100 Units.

The course starts at a rather introductory level, but the progress is swift. It covers a brief survey of basic probability theory, and provides an introduction to some useful statistical distributions, both univariate and multivariate. A discussion of copulas and various correlation measures. Risk measures and ideas behind a reasonable risk measure. A few elements from Monte Carlo simulation. Statistical estimation, the maximum likelihood method and nonparametric methods. Asymptotic properties of estimators. Goodness of fit tests and model selection. Extreme value theory. Instructor(s): J. Paulsen Terms Offered: Autumn

#### FINM 33602. Advanced Fixed Income Derivatives. 100 Units.

The course will focus on additional chapters of fixed income derivatives that could not be included in the basic Fixed Income Derivatives, Part I and II courses. The topics include term curve bootstrapping and smoothing; in-depth derivation of the HJM framework; Black's model and forward measure; the statistical model and HJM; market models calibration; volatility skew adjustments for interest rate models; CVA counterparty risk; risk management with the statistical model; numerical methods for Hull-White model: trinomial trees, Monte Carlo and finite difference methods.

Instructor(s): Y. Balasanov Terms Offered: Winter

Prerequisite(s): Students will be required to have a solid understanding of the material covered in Fixed Income Derivatives, Part I (33603) and Mathematical Foundations of Option Pricing (33000). Students who wish to take the course must also complete and pass a placement exam.

#### FINM 33603. Fixed Income Derivatives I. 050 Units.

This is part one of a two-part course on Fixed Income Derivatives. The topics will include an introduction to fixed income markets, a detailed review of fixed income derivative instruments, and a general approach to bootstrapping the LIBOR term curve from available market quotes. We also discuss the application of the Black-Scholes-Merton model to pricing European swaptions and caps/floors. Students will study a statistical approach to building a foundation for the Heath-Jarrow-Morton framework of interest rate models, covered in the second part of the course.

This is a 5-week course taught in the second-half of the quarter. Instructor(s): Y. Balasanov, L. Doloc, J. Greco Terms Offered: Autumn

#### FINM 33604. Fixed Income Derivatives II. 050 Units.

This is part two of a two-part course on Fixed Income Derivatives. The topics covered will include a derivation of the Heath-Jarrow-Morton family of models using methods of arbitrage pricing theory and an in-depth case study of the Hull-White interest rate model (an HJM model). Additionally, students will learn about the role of forward measure in pricing fixed income derivatives and LIBOR market models.

This is a 5-week course taught in the first-half of the quarter. Instructor(s): Y. Balasanov, L. Doloc, J. Greco Terms Offered: Winter Prerequisite(s): FINM 33603 Fixed Income Derivatives I

Note(s): Students should be prepared for the extensive use of Stochastic Calculus.

#### FINM 34500. Stochastic Calculus. 100 Units.

The course starts with a quick introduction to martingales in discrete time, and then Brownian motion and the Ito integral are defined carefully. The main tools of stochastic calculus (Ito's formula, Feynman-Kac formula, Girsanov theorem, etc.) are developed. The treatment includes discussions of simulation and the relationship with partial differential equations. Some applications are given to option pricing, but much more on this is done in other courses. The course ends with an introduction to jump process (Levy processes) and the corresponding integration theory.

Instructor(s): G. Lawler Terms Offered: Winter

Equivalent Course(s): STAT 39000

### FINM 35000. Topics in Economics. 100 Units.

This course explores the economics of asset pricing. Going beyond no-arbitrage valuation, students learn how asset prices can be linked to economic fundamentals. As the recent recession and financial crisis show, there are important links between financial markets and the real economy. This course gives students a systematic way for understanding these links. Several important areas and puzzles of financial economics are presented. Topics in equity pricing include return-predictability, excess volatility, and factor-models. In fixed income, the course covers the empirical evidence of the term structure and how it compares to the Expectations Hypothesis, as well as how these facts fit with classes of common term-structures models. In international finance, the course covers the carry trade, the home-equity bias, and the currency trilemma.

Instructor(s): M. Hendricks Terms Offered: Spring

## FINM 36700. Portfolio Theory and Risk Management I. 050 Units.

The course introduces investment analysis, allocation, risk control. The course begins with classic topics such as mean-variance analysis, priced and un-priced risk, hedging, and the efficient frontier of investment opportunities. Factor models are used to understand the relation between risk and expected return. Examples covered in the course include the CAPM, Black-Litterman, and principal component factors. Finally, the course discusses modern risk control, including risks from interest-rates, liquidity, and credit. Value-at-risk, and expected shortfall are discussed.

This is a 5-week course taught in the first-half of the quarter.

Instructor(s): M. Hendricks Terms Offered: Autumn

#### FINM 36702. Portfolio Theory and Risk Management II. 050 Units.

This course combines a technical topic with an analysis of situations that produce outsized losses. Students gain familiarity with the credit portfolio loss models that are used to limit trading, allocate costs, and determine required bank capital. They also review the interplay between the technical and human factors that has led to prominent risk control failures. Unique in the Financial Math program, students make in-class presentations that detail the optimal responses of various market participants to unexpected circumstances.

This is a 5-week course taught in the second-half of the quarter.

Instructor(s): J. Frye Terms Offered: Spring

Prerequisite(s): FINM 36700 Portfolio Theory and Risk Management I

#### FINM 37300. Foreign Exchange/Fixed Income Derivatives. 050 Units.

This course will examine international currency markets, financial products, applications of quantitative models and FX risk management with an emphasis on the derivative products and quantitative methods in common use today. Topics will include a) the behavior of FX rates: exchange rate regimes, international monetary systems, FX modeling and forecasting, b) FX markets and products: spot, forward, futures, deposits, cross-currency swaps, non-deliverable contracts, FX options, exotic options, hybrid products and structured notes, and c) Risk management: from the trading book, trading institution, global asset manager and multinational corporation perspectives.

This is a 5-week course taught in the second-half of the quarter.

Instructor(s): A. Capozzoli Terms Offered: Winter

#### FINM 37400. Advanced Option Pricing. 050 Units.

This course covers several areas oriented towards pricing and application of various non-standard derivative securities, structured notes and credit derivatives. In addition, fixed income applications such as option adjusted analysis and hedging applications are covered. The course includes live Reuters Eikon and Bloomberg screens.

This is a 5-week course taught in the first-half of the quarter. Instructor(s): J. Mosevich, I. Nelken Terms Offered: Spring



# MASTER OF SCIENCE PROGRAM IN THE PHYSICAL SCIENCES

#### DIRECTOR

• Robert Wald

#### PROGRAM DESCRIPTION

The Master of Science Program in the Physical Sciences Division (MS-PSD) at the University of Chicago is a program designed for students who wish to broaden or deepen their knowledge of the physical and mathematical sciences. It should be especially valuable to those seeking to prepare for further graduate work, including those who wish to prepare for a graduate program in a field outside of their undergraduate major. MS-PSD students have the opportunity to work with faculty members in the Departments of Astronomy & Astrophysics (http://astro.uchicago.edu), Chemistry (http://chemistry.uchicago.edu), Computer Science (http://www.cs.uchicago.edu), the Geophysical Sciences (http://geosci.uchicago.edu), Mathematics (http://www.math.uchicago.edu), Physics (http://physics.uchicago.edu), Statistics (http://www.stat.uchicago.edu), and the program in Biophysical Sciences (http://biophysics.uchicago.edu). The MS-PSD program allows students, in consultation with the faculty Director, to design programs of study to meet individual student needs. This flexibility combined with the rigor of UChicago courses makes the program unique.

Students normally complete the M.S. in Physical Sciences in nine-months (three quarters). The program is administered by the PSD Dean of Students office and directed by Professor Robert Wald, Charles H. Swift Distinguished Service Professor, Department of Physics, Enrico Fermi Institute and the College.

# Courses and Master's Project

MS-PSD students are required to complete nine courses, including a master's thesis project. Students choose from quarterly course offerings (http://timeschedules.uchicago.edu) in physical sciences departments. At least four of the courses must be graduate-level courses in a single department or associated with a specific interdepartmental track, such as environmental science, biochemistry/physics, computational methods in physical science, and optics/imaging. To accommodate students who seek to broaden their knowledge of the physical sciences as well as those seeking to transition to a new field, students may be allowed to take as many as three advanced undergraduate courses in fields outside of their undergraduate majors. In all cases the Director must approve the chosen curricula.

For experimentalists a typical master's project might consist of performing or assisting with a laboratory research experiment. For theorists a typical master's project might consist of performing some numerical simulation experiments. Students normally choose their projects in the winter quarter, carry them out during

the spring quarter, and summarize their projects' results in a required master's paper.

#### APPLYING

All application materials must be received by February 28 to ensure full consideration for admission to the following autumn class. Applications received after February 28 will be considered if open spots are available. Interviews are not required, but prospective students are encourage to visit campus (http://visit.uchicago.edu).

The application is online (http://gradadmissions.uchicago.edu/admissions/apply) and all supporting materials are submitted electronically. These include:

- A personal statement of academic and career objectives.
- One transcript from each educational institution beyond high school. *Students* seeking admission to the program normally must have a baccalaureate degree in a traditional discipline of the physical sciences.
- Three letters of recommendation.
- Official Graduate Record Examination (GRE) scores. The general exam is required. A
  GRE Subject Test in an area of physical sciences is strongly recommended.
- TOEFL scores (see below).
- Application fee (waived for University of Chicago alumni: see fee waivers section in the application for other instances).

#### The University of Chicago GRE & TOEFL institution code is 1832.

English Language Requirements (https://internationalaffairs.uchicago.edu/page/english-language-requirements)

Applicants whose first or native language is not English must demonstrate an adequate command of both spoken and written English, and they are required to submit English proficiency test scores as part of their application. We recognize the internet-based test (iBT) of the Test of English as a Foreign Language (TOEFL) and the International English Language Testing System (IELTS). Applicants whose total score on the four-part TOEFL falls below 90 (or IELTS falls below 7) will not normally be admitted unless other demonstrable evidence of proficiency in English is available.

The English language requirement may be waived if the applicant is a native of or studied full-time status for at least one academic year within the last five years in the U.S., the United Kingdom, Ireland, Australia, New Zealand or English medium universities in Canada or South Africa. Students who studied in English in other countries, for example, India, Pakistran, the Philippines, Hong Kong, Singapore, etc., are not exempt from the English language requirement.

#### QUESTIONS

Prospective students should contact the Associate Dean of Students in the Physical Sciences Division with questions about the program and/or the application process:

Emily Easton 773-702-9708 eweaston@uchicago.edu

Master of Science in the Physical Sciences Program Office of the Dean of Students George Herbert Jones Laboratory #116 5747 South Ellis Avenue Chicago, IL 60637



# DEPARTMENT OF ASTRONOMY AND ASTROPHYSICS

#### Chair

- Angela Olinto Professors
- John Carlstrom
- Kyle Cudworth
- Joshua A. Frieman
- Doyal A. Harper, Jr.
- Stephen Kent
- · Edward Kibblewhite
- Alexei Khokhlov
- Edward W. Kolb
- · Arieh Königl
- Andrey Kravtsov
- · Richard G. Kron
- Donald Q. Lamb, Jr.
- Stephan Meyer
- · Angela Olinto
- Robert Rosner
- Noel M. Swerdlow
- Simon P. Swordy, Physics
- James W. Truran, Jr.
- Michael Turner
- Donald G. York
   Associate Professors
- Fausto Cattaneo
- Scott Dodelson
- Nickolay Y. Gnedin
- Dan Hooper
- Wayne Hu
   Assistant Professors
- · Jacob Bean
- Hsiao-Wen Chen
- · Daniel Fabrycky
- Michael Gladders
   Emeritus Faculty

- · James W. Cronin
- · Roger Hildebrand
- · Richard H. Miller
- Takeshi Oka, Chemistry
- · Patrick E. Palmer
- · Eugene Parker
- · Peter O. Vandervoort

The Department of Astronomy & Astrophysics awards the Ph.D. degree, and carries on programs of research and graduate instruction on the quadrangles of the University; at Adler Planetarium, Chicago; at Apache Point Observatory, Sunspot, New Mexico; and at the Yerkes Observatory, Williams Bay, Wisconsin.

### **ADMISSION**

Students seeking admission to the department for graduate study should have the training in physics and mathematics that is represented by the conventional bachelor's degree. Candidates for admission should request an admissions packet from the director of admissions. Applicants must submit recent scores on the Graduate Record Examination Aptitude and Advanced Physics tests.

# PROGRAM OF STUDY

The program leading to the Ph.D. degree in Astronomy & Astrophysics has four parts: a program of six required and elective courses, a research project, the candidacy examination, and research leading to a dissertation. The program and the requirements for graduate degrees are summarized below. A more detailed description of the program and the degree requirements can be obtained from the Director of Admissions, 5607 S. Drexel (TAAC), Chicago, IL 60637. This additional information is also available on line at http://astro.uchicago.edu/academics/prospective.html. Students may apply online at http://gradadmissions.uchicago.edu/academics\_research/programs/astro\_phd/.

During the first and second academic years, students normally take the course sequence:

ASTR 30100	Stars	100
ASTR 30300	Intersellar Matter	100
ASTR 30400	Galaxies	100
ASTR 31000	Cosmology	100
ASTR 31100	High Energy Astrophysics	100
ASTR 30600	Detection of Radiation	100

The normal program of courses in the first two-years of graduate student in Astronomy and Astrophysics consist of 6 required courses. The courses are scheduled as follows: Year 1, Autumn quarter - Stars; Winter quarter - Interstellar Matter; Spring quarter - Galaxies. Year 2, Autumn quarter - Cosmology; Winter quarter - High Energy Astrophysics; Spring quarter - Detection of Radiation. First and second year students, will conduct a summer research project and participate

in research activities, or courses of their choice, in all quarters. Weekly activities include Faculty Research Seminars, Graduate Student Research Seminars, and Department Colloquia.

Students will report on their cumulative research activity and participate in a candidacy examination at the end of <u>Year 2</u>. Admission to candidacy depends on faculty approval of the students' performance in course work and the above mentioned activities. A student is officially admitted to research on the basis of a satisfactory performance on the Candidacy Examination. Upon which, the student should arrange with a faculty member to have that faculty member serve as sponsor for the students research.

The student must write a dissertation. The dissertation shall consist of a paper, or papers, submitted for publication in a recognized scientific journal, and the student may be the sole author, or a member of multiple authors by a group who will be determined by a faculty committee. A dissertation shall be accepted as satisfying the requirements of the Department of Astronomy and Astrophysics only if it has been approved by the Dissertation Committee and has been submitted for publication in a recognized scientific journal.

\*Please note that the Department of Astronomy and Astrophysics is transitioning to a new graduate program and all transitions will be set by the Autumn 2013 quarter.

# THE DEGREE OF DOCTOR OF PHILOSOPHY

Students who enter the department intending to proceed toward the degree of Doctor of Philosophy are normally required to complete the 3xx level program of lecture courses described above. With the approval of the student's dissertation committee, modifications of this requirement may be made. Students are expected to maintain a grade point average of at least 3.0 in their course work.

At the end of the second year, after completing the basic 3xx level program courses, students who wish to begin research for the degree of Doctor of Philosophy must pass both the written and oral portions of the candidacy examination, which includes the subject matter of the basic 3xx level astronomy courses. The candidacy examination will be given towards the end of the Summer quarter of the student's second year. A student whose performance on this examination does not merit continuation in the program may retake the examination once. Ordinarily, students who do not proceed toward the Ph.D. are given the opportunity to complete the master's degree. Graduate students who are permitted to proceed toward the degree of Doctor of Philosophy may elect to receive an incidental Master of Science degree after having passed the candidacy exam.

The requirements for the degree of Doctor of Philosophy include the divisional requirements. In particular, a student who is permitted to begin research for the dissertation based on a satisfactory performance on the candidacy examination must still formally establish candidacy for the degree according to divisional requirements. A degree candidate must fulfill a two quarter teaching requirement, which is explained in detail in the departmental graduate program document. A

candidate for the degree must submit a dissertation acceptable to the department and pass a final oral examination on the dissertation. The Ph.D. degree is awarded only after the dissertation or a paper based on the dissertation is submitted for publication in a recognized scientific journal. Demonstration of proficiency in a foreign language is not required.

#### FACILITIES FOR RESEARCH

A student may perform the research for the doctoral dissertation on the quadrangles of the University or Yerkes Observatory. A student working at either location has access to the complete facilities of the department.

Moreover, there exists in the other departments and in the institutes of the Division of the Physical Sciences a variety of research programs which bear on modern astrophysics. Contact with persons working in these programs is possible and is encouraged. In fact, students research programs may be carried out under the direction of faculty members in these departments and institutes.

Computing resources for the department include a multiprocessor SUN SPARC server, networked printers, and a multitude of workstations and PCs, with Ethernet and LocalTalk (AppleTalk) connections in every room. This equipment is linked via ethernet with the computation facilities of the Division of the Physical Sciences, which include SUN and SGI servers, and a high speed line links them to the super computer facilities of the National Center for Supercomputer Applications at the University of Illinois at Urbana and of the Argonne National Laboratory (operated by the University of Chicago). These resources form a powerful facility for computational astrophysics.

The principal instruments at the Yerkes Observatory are the 40 inch refracting telescope and the 41 inch and 24 inch reflecting telescopes, all of which are used for both instrument testing and research. The department's adaptive optics group has actively used the 41 inch reflector in recent years, and the astrometric program uses the refractor extensively. The Yerkes Observatory also houses an excellent library as well as engineering facilities and shops that are heavily used in developing instrumentation for the department's wide ranging activities.

The University of Chicago is a member of the Astrophysical Research Consortium, a consortium of several universities that has built and operates a 3.5 meter new technology telescope on Sacramento Peak in Sunspot, New Mexico. This remotely operated facility was designed to permit rapid changes in instrumentation and in observing mode.

The University is also a key partner in the Sloan Digital Sky Survey (SDSS). The SDSS is a project for which a 2.5 meter new technology telescope is mapping the Northern Galactic sky cap with five band photometry and obtaining redshifts of approximately one million galaxies and one hundred thousand QSOs.

By arrangement, facilities of the Argonne National Laboratory may be used by students in the department. These include unique facilities for experimental nuclear astrophysics, and a computation center equipped with vector and parallel processing computers. Students also may take advantage of the resources of the Fermi National Accelerator Laboratory (Fermilab) in Batavia, Illinois, including the computational facilities, through its Institute for Cosmology and Particle Physics, funded by the National Aeronautics and Space Administration, or through the program in Experimental Astrophysics.

In recent years, some students have also used national facilities such as the National Radio Astronomy Observatory, the National Optical Astronomy Observatories, and the NASA Ames Research Center.

#### ASTRONOMY AND ASTROPHYSICS COURSES

#### ASTR 30100. Stars. 100 Units.

A course description will soon be available on the Astronomy and Astrophysics website.

#### ASTR 30300. Intersellar Matter. 100 Units.

A course description will soon be available on the Astronomy and Astrophysics website.

#### ASTR 30400. Galaxies. 100 Units.

A course description will soon be available on the Astronomy and Astrophysics website.

#### ASTR 30600. Detection of Radiation. 100 Units.

A course description will soon be available on the Astronomy and Astrophysics website.

ASTR 31000. Cosmology. 100 Units.

ASTR 31100. High Energy Astrophysics. 100 Units.

ASTR 31300. Extragalactic Studies. 100 Units.

ASTR 31500. Dynamics of Fluids. 100 Units.

ASTR 31600. Dynamics Particles. 100 Units.

ASTR 32000. Relativistic Astrophysics. 100 Units.

ASTR 32100. Cosmology. 100 Units.

ASTR 33000. Computational Physics and Astrophysics. 100 Units.

ASTR 34000. Statistical Methods in Astrophysics. 100 Units.

ASTR 37100. Precandidacy Research: Astron. Var Units.

For course description contact Astonomy and Astrophysics.

ASTR 38000. History of the Telescope. 100 Units.

ASTR 38100. General History of Astrophysics. 100 Units.

#### ASTR 38800. Galileo's Astronomy and Conflicts with the Church. 100 Units.

This course is devoted to Galileo's work in astronomy, above all the Dialogue on the Two Great Systems of the World, and his conflicts with the Church concerning the interpretation of Scripture and the attempt to prove the Copernican theory.

ASTR 40100. Practicle Data Analysis. 100 Units.

ASTR 40200. Particle Astrophysics. 100 Units.

ASTR 40300. Structure Formation in the Universe. 100 Units.

ASTR 40400. QSOs in the SDSS. 100 Units.

ASTR 40600. Gravitational Lensing. Units.

Theory of bending of light by gravitational potentials followed by astrophysical and cosmological applications including; microlensing, planetary searches, strong lensing, and weak lensing.

ASTR 40700. AstroPolitics. 100 Units.

ASTR 40800. The Perturbed Universe. 100 Units.

ASTR 40900. Topics in Observational Cosmology. 100 Units.

ASTR 41100. Science of the Dark Energy. 100 Units.

ASTR 41300. Topics in Stellar Astronomy. 100 Units.

ASTR 41400. Advanced Fluid Dynamics. 100 Units.

ASTR 41500. Astrophysical Jets. 100 Units.

ASTR 41600. Intergalatic Medium. 100 Units.

# ASTR 41800. Introduction to Intergalatic Medium Studies. 100 Units.

Introduction to intergalactic medium studies. The course will begin with a historical overview of absorption-line studies and proceed with in-depth discussion of ongoing research topics. These include the re-ionization epoch, chemical enrichment of the universe, and association between luminous matter traced by galaxies and gaseous clouds probed by absorption-line observations.

ASTR 42200. Early Universe Cosmology. 100 Units.

ASTR 42700. Atomic Structure and Spectra. 100 Units.

ASTR 43000. Plasma Astrophysics. 100 Units.

ASTR 43100. Ultra-High Energy Cosmic Rays. 100 Units.

#### ASTR 43200. High Energy Cosmic Particles. Units.

This graduate level course will focus on high energy particle astrophysics from basic facts to recent discoveries in the study of cosmic rays, gamma-rays, and neutrinos. The course will introduce the main concepts of proposed mechanisms for generating these particles, the past and current detections techniques and observatories, and recent observations. Some particle physics and cosmology will be covered including models of dark matter particles and the effect of cosmic backgrounds on high energy cosmic particles.

ASTR 43300. Accretion Disks. 100 Units.

ASTR 43600. Theory of Supernovae. 100 Units.

ASTR 44200. Topics in Astrophysical Fluid Dynamics. 100 Units.

ASTR 44800. Cosmic Microwave Background. 100 Units.

## ASTR 45000. Extreme Optics. 100 Units.

Frontiers in optics will be a review of the state of the art in optics as it paplies to astronomy. Topics to be covered will include

- (1) Single dish optics: adaptive optics, building large telescopes and coronography
- (2) Interferometers using multiple telescopes
- (3) Lasers for guide stars and wavelength control
- (4) LIGO and LISA

ASTR 45100. High Resolution Imaging. 100 Units.

ASTR 45200. Primer on the SDSS, 100 Units.

ASTR 45300. Computational Cosmology. 100 Units.

#### ASTR 45400. Image Processing (Analysis) 100 Units.

Many key results in current research rely on the inner workings of codes that operate on pixels. Examples are measuring the weak lensing shear field, measuring precise light curves for supernovae in the presence of contaminating light from a host galaxy, high-precision relative photometry (e.g. to detect transits), reliable morphological star/galaxy classification to faint flux limits, reliable color measurements (e.g. for photometric redshifts), crowded-field photometry, and detection of diffuse light to very low surface brightness levels. This course will explore some of the ideas that have been developed to address these and other problems of interest, illustrated by CCD detectors. The format of the class will be first to consider what goes into the pixels (e.g. ingredients of the point-spread function), followed by the techniques for unwinding the instrumental effects, concluding with what extracted parameters are optimal for some particular application (what comes out of the pixels).

#### ASTR 45800. Exoplanets. 100 Units.

The study of exoplanets, planets associated with stars other than the Sun, has become one of the most exciting and rapidly evolving areas of modern astronomy. This new course will address general questions concerning the detection and characterization of exoplanets and of what we have already learned about the origin and properties of exoplanetary systems and of how they compare with those of the Solar System. This discussion will be placed in the context of models of planet formation in protoplanetary disks, their structure and composition, and their dynamical interactions with the natal disk, the parent star, and other planets. The course will make use of seminal papers on these topics and will encourage active participation by the students.

#### ASTR 45900. What Makes a Planet Habitable? 100 Units.

This course explores the factors that determine how habitable planets form and evolve. We will discuss a range of topics, from the formation of planets around stars and the delivery of water, to the formation of atmospheres, climate dynamics, and the conditions that allow for the development of life and the evolution of complex life. Students will be responsible for reading and discussing papers in peer-reviewed journals each meeting and for periodically preparing presentations and leading the discussion.

Instructor(s): D. Abbot, F. Ciesla Terms Offered: Winter

Equivalent Course(s): GEOS 32060

ASTR 46400. Nuclear Astrophysics. 100 Units.

ASTR 46500. Atomic Spectra. 100 Units.

ASTR 47100. Evolution of Galaxies. 100 Units.

ASTR 47200, Star Clusters, 100 Units.

ASTR 47300. Distant Galaxies. 100 Units.

ASTR 48000. Current Topics in Astrophysics (Graduate) 100 Units.

ASTR 48100. Advanced Computational Techniques. 100 Units.

ASTR 48200. Dark Energy and Cosmic Acceleration. 100 Units.

ASTR 49400. Post-Candidacy Research. Var Units.

ASTR 49900. Graduate Research Seminar. 100 Units.



# GRADUATE PROGRAM IN BIOPHYSICAL SCIENCES

#### Chair

• Tobin R. Sosnick

Web Site

http://biophysics.uchicago.edu/

The Graduate Program in Biophysical Sciences is designed to transcend traditional departmental boundaries for the purpose of training scientists who will excel at addressing biological problems using quantitative and physical approaches. The program, which grants a Ph.D. degree from both the Biological and Physical Science Divisions, serves the needs of students who have strong backgrounds in the physical sciences and are intrigued by the interface of the physical, biological and computational sciences. Dual mentorship is a fundamental component of the program. Each student chooses a pair of dissertation advisors from across our diverse faculty and fully participates in both of these research groups.

The participating faculty in the program are drawn from The Physical and The Biological Sciences Divisions, and Argonne National Laboratory and hold appointments in:

#### **DEPARTMENTS & COMMITTEES**

- Ben May Dept. for Cancer Research
- Biochemistry & Molecular Biology
- Cancer Biology
- Cell & Molecular Biology
- Cell Physiology
- Chemistry
- Computational Neuroscience
- Computer Sciences
- Developmental Biology
- Genetics, Genomics & Systems Biology
- Immunology
- Mathematics
- Microbiology
- Neurobiology
- Pathology
- Pediatrics
- Physics

#### **INSTITUTES & CENTERS**

• Inst. for Biophysical Dynamics

- Computation Institute
- Inst. for Genomics & Systems Biology
- · James Franck Institute
- Center for Adv. Radiation Sources
- Materials Research Science & Engineering Center
- · Office of Shared Research Facilities
- · Institute for Molecular Engineering

#### CURRICULUM

The curriculum assumes that entering students are well-grounded in the physical sciences. During the first year, students are expected to take one class per quarter from both the Biological Sciences Division and the Physical Sciences Division (6 courses total). The Biological Organization Series consists of courses chosen to rapidly teach the fundamental biology necessary to enter a laboratory and begin serious interdisciplinary research. To build upon students' strengths in the physical sciences, the first year includes three courses chosen from a list of graduate courses offered in Chemistry or Physics. The curriculum can be modified to fit the strengths and weaknesses in a student's background.

Students undertake a series of laboratory rotations as part of the process of identifying a dissertation topic. These rotations are usually performed during the Winter and Spring Quarters during the first academic year.

#### INTERDISCIPLINARY PRACTICAL TRAINING

One of the unique advantages of the program is the 3 quarter laboratory course: From Production to Measurement and Analysis. In this intense, 16 hour a week course students deeply explore a series of important current instruments and techniques while carrying out the systematic characterization of several genes and their expressed proteins. The genes are chosen from the long list of "unknown ORFs" - open reading frames that have been predicted by genome sequencing projects, but have never been examined further.

The laboratory course is managed by a full-time course director who works closely with the students to provide experimental and intellectual continuity. The laboratory course covers (1) sample preparation and high throughput selection methods (e.g. engineering, expression, synthesis, and labeling of proteins and nucleic acids) and high throughput selection methods (phage display, in vitro selection); (2) measurement (spectroscopy and imaging including single molecule methods, NMR, x-ray diffraction, and mass spectrometry, etc.); and (3) computational approaches (extracting information from large data sets, bioinformatics, simulation and modeling). Although it is impossible to cover all biophysical methods, the process of mastering a subset of the important techniques gives students the confidence and foundation to build in any direction.

The first section of this course is the four-week Biological Research Immersion, which starts in late August and ends before the start of Fall Quarter. The course continues through the Autumn and Winter Quarters.

The program in Biophysical Sciences is an inherently collaborative training program, and the foundation of collaboration is the ability to coherently express complex ideas. As part of the laboratory course, students are expected to give frequent presentations, both oral and written: Analysis of recent papers, background preparation before research seminars, overviews of upcoming experimental techniques, experimental proposals, and presentations of results. As a group, students also participate in two large projects during the year - building an advanced optical instrument from basic components, and writing a software package to simulate a biological process.

#### Dual Mentorship

In order to truly bridge the expertise and approach of two scientific fields it is necessary to fully participate in both. The research program each professor maintains is a vibrant and dedicated research group whose members share in the daily successes and frustrations of their related questions. It is this shared intellectual exertion that moves a subject forward, and it is this environment that most efficiently teaches the deepest understanding. In our experience, this dual mentorship creates an unparalleled learning structure and will lead to the development of unimagined science.

For a list of trainers and their affiliations, details about admissions, and current information about this new and innovative program, see http://biophysics.uchicago.edu/

#### **BIOPHYSICAL SCIENCES COURSES**

#### BPHS 31000. Biophysics of Biomolecules. 100 Units.

This course covers the properties of proteins, RNA, and DNA, as well as their interactions. We emphasize the interplay between structure, thermodynamics, folding, and function at the molecular level. Topics include cooperativity, linked equilibrium, hydrogen exchange, electrostatics, diffusion, and binding.

Instructor(s): T. Sosnick Terms Offered: Spring

Prerequisite(s): Consent of instructor

Equivalent Course(s): BIOS 21328,BCMB 32200

# BPHS 31800. Current Seminar Topics in Biochemistry & Molecular Biology. 50 Units.

This course will expose students to current research topics in biochemistry and molecular biology by highlighting a selection of speakers (departmental faculty adn other invited speakers) from the weekly seminar series. Prior to each highlighted seminar, we will discuss relevant papers and subsequently, we will review the seminar. This is a required ½ credit course for all BMB first-year graduate students and will be graded as Pass/Fail.

Terms Offered: Autumn

Equivalent Course(s): BCMB 31800

#### BPHS 35001. Synthesis and Modification. 150 Units.

This course is 20 hours per week of intensive training in research in the biological sciences, intended for first year students in the Biophysical Sciences Program who typically have majored in one of the physical sciences and want to pursue a PhD project at the interface between the physical and biological sciences. The course continues through Winter quarter.

Instructor(s): A. Hammond Terms Offered: Autumn, Winter Note(s): Open to first year BPHS students only

# BPHS 47300. Genomics and Systems Biology. 100 Units.

This lecture course explores the technologies that enable high-throughput collection of genomic-scale data, including sequencing, genotyping, gene expression profiling, assays of copy number variation, protein expression and protein-protein interaction. We also cover study design and statistical analysis of large data sets, as well as how data from different sources can be used to understand regulatory networks (i.e., systems). Statistical tools introduced include linear models, likelihood-based inference, supervised and unsupervised learning techniques, methods for assessing quality of data, hidden Markov models, and controlling for false discovery rates in large data sets. Readings are drawn from the primary literature.

Instructor(s): Y. Gilad, D. Nicolae Terms Offered: Spring Prerequisite(s): STAT 23400 or Statistics in the Biomath Sequence Equivalent Course(s): BIOS 28407, CABI 47300, HGEN 47300, IMMU 47300



# DEPARTMENT OF CHEMISTRY

#### Chair

• Richard F. Jordan

#### **Professors**

- Laurie Jeanne Butler
- · Aaron Dinner
- Philippe M. Guyot Sionnest
- · Chuan He
- Gregory Hillhouse
- Michael D. Hopkins
- Richard F. Jordan
- Stephen Kent, Biochemistry & Molecular Biology
- · Sergey Kozmin
- Ka Yee Christina Lee
- · Donald H. Levy
- Wenbin Lin
- · David Mazziotti
- Joseph Piccirilli, Biochemistry & Molecular Biology
- · Viresh Rawal
- Norbert F. Scherer
- · Steven J. Sibener
- Dmitri Talapin
- Andrei Tokmakoff
- Luping Yu

Associate Professors

• Gregory Engel

Assistant Professors

- · Jared Lewis
- Bozhi Tian
- Yossi Weizmann

**Emeritus Faculty** 

- R. Stephen Berry
- Brice Bosnich
- Robert N. Clayton, Geophysical Sciences
- Philip E. Eaton
- Karl Freed
- Robert Gomer
- Jack Halpern

- Robert Haselkorn, MGCB
- · John C. Light
- James R. Norris, Jr.
- Takeshi Oka
- · Stuart A. Rice
- · Hisashi Yamamoto

The Ph.D. program in the Department of Chemistry offers wide opportunity and unusual flexibility for advanced study and research, and is designed to encourage individuality, independence, and excellence in students. Most students select their research advisor by winter quarter of their first year and are engaged in research by the spring quarter. The department has neither a system of cumulative examinations nor a written major examination. There are relatively few course requirements and great flexibility as to which courses may be taken.

In the Division of the Physical Sciences barriers between departments are low. Students in the Department of Chemistry often take courses in other departments and can even earn the degree in chemistry for research that has been done under the supervision of a member of another department. Students are encouraged to fashion special programs of study under the guidance of the faculty.

# **APPLICATION**

A completed application will include undergraduate transcripts, three letters of recommendation, and the results of the GRE examination (to include the advanced test in chemistry). Foreign applicants must also submit the results of the TOEFL or IELTS.

Students are normally admitted beginning with the autumn quarter of each year. The sequential nature of some of our courses makes this the best time to begin graduate studies. Although applications may be considered at any time at the discretion of the admissions committee, students are strongly encouraged to complete their applications by December 31st. The department has no admissions quota and in recent years the entering class has numbered between 20 and 38.

A well defined Master of Science program of appropriate rigor is maintained, but the Department of Chemistry does not offer financial support to students whose degree goal is the master's degree. This degree is neither a prerequisite for, nor a forerunner of, the Ph.D. degree, although it may be acquired along the way if a student so desires.

The Department of Chemistry participates actively in the Medical Scientist Training Program (MSTP) administered by the Pritzker School of Medicine at the University of Chicago. MSTP is a structured six year program leading to both the M.D. degree and the Ph.D. in chemistry. Full tuition and a stipend are awarded for the six year period. MSTP is funded by the National Institute of General Medical Sciences and is open only to U.S. citizens.

# FINANCIAL SUPPORT

All students admitted to the Ph.D. program are offered financial support. Generally this takes the form of a first year teaching assistantship which provides a complete merit tuition scholarship and pays a competitive monthly stipend. Teaching assistants are usually assigned to one of the undergraduate laboratory courses. Duties involve supervising one class section (13-18 students) for one afternoon per week, holding a discussion session and office hours, and assisting with grading. The total time required is about fifteen hours per week.

By the end of the third quarter students have usually selected their research supervisor. An appointment as a research assistant (stipend plus tuition) normally continues throughout the period of research.

There are several special supplemental fellowships and scholarships offered by the department and the University. All students seeking admission are automatically considered in the competition for these awards. No separate application is required. Students are urged to compete for the many national and other external fellowships available.

#### ADVANCED DEGREES

The department administers basic examinations in the fields of inorganic, organic, and physical chemistry in the autumn, winter, and spring quarters. Graduate students are expected to take these examinations upon entering the department. Deficiencies evidenced by these examinations must be remedied and the examinations passed prior to the end of the third quarter of residence (not counting summer quarter).

In the first year, students must satisfactorily complete nine courses. At least six of these must be 30000 level courses from the offerings of the Department of Chemistry or of related departments in the Divisions of the Physical and the Biological Sciences, and of these six courses, at least two shall be in different areas of chemistry, e.g., inorganic, organic, or physical chemistry. For this purpose, inorganic chemistry courses are defined as Chemistry 30100- 31100, organic chemistry courses as Chemistry 32100- 33400, and physical chemistry courses as Chemistry 36100-38700. Grades of C or better are expected. The remaining three courses may include Chemistry 35000 and/or 40000 level chemistry research courses; however, one may not register for these courses during the autumn quarter. An advisor assists students in formulating programs of study that will best satisfy personal needs and departmental requirements. Courses taken outside the department to satisfy the first year requirements must be approved by the advisor.

Students who have completed all courses with grades of C or better (P in research courses) may be recommended for the S.M. degree; these students may, at the discretion of a faculty member, be required to submit a paper on their work in CHEM 35000 or a 40000 level research course.

At the end of the spring quarter in the first year, the faculty review the student's overall record. Course performance is a major part of this review; a B average or better in all 30000 level courses (excluding CHEM 35000) is expected. At this time

the department will advise students whether they are qualified to continue studies and to prepare for the Ph.D. candidacy examination described below. A student seeking admission to Ph.D. candidacy must take the candidacy examination before the end of his or her fifth quarter in residence (normally October for this purpose summer quarter is counted as a quarter in residence). This examination is based on the student's written research prospectus and on the discussion of scientific papers selected by the examining committee. The student presents the research prospectus to the committee, and must be prepared to discuss the relevant chemical literature, progress to date, plans for future work, and the relationship of the research to other chemical problems. The student is expected to conduct a critical analysis of the scientific papers selected by the committee.

The faculty review the recommendations of the candidacy examining committee and, after consideration of the student's academic record, vote on whether or not to recommend that the student be admitted to candidacy. All candidates for the Ph.D. degree are required to participate in some form of teaching. Normally this involves serving as a teaching assistant for three quarters.

The Ph.D. degree is granted upon satisfactory completion of scholarly research work, presented in a written thesis, discussed in a public seminar, and defended orally before a faculty committee.

Students should especially note the following:

- It is the responsibility of the individual research sponsor to monitor the progress of a student's research. Unsatisfactory progress may result in termination of financial support and/or dismissal from the Ph.D. program.
- The department will recommend formal admission to candidacy as soon as the student has:
  - Satisfied the basic examination requirement
  - Satisfied the course requirements
  - Passed the candidacy examination
  - · Demonstrated satisfactory progress in research and teaching
- Students should consider satisfying any or all course requirements by taking
  proficiency examinations. Application to take a proficiency examination should
  be made directly to the person who will be teaching the particular course. The
  examinations will be administered during the first week of the quarter in which
  the course is offered. No stigma is attached to failing a proficiency examination.

#### **CHEMISTRY COURSES**

#### CHEM 30100. Advanced Inorganic Chemistry. 100 Units.

Group theory and its applications in inorganic chemistry are developed. These concepts are used in surveying the chemistry of inorganic compounds from the standpoint of quantum chemistry, chemical bonding principles, and the relationship between structure and reactivity.

Instructor(s): M. Hopkins Terms Offered: Autumn Prerequisite(s): CHEM 20100 and CHEM 26100

#### CHEM 30200. Synthesis and Physical Methods in Inorganic Chemistry. 100 Units.

This course covers theoretical and practical aspects of important physical methods for the characterization of inorganic molecules. Topics may include NMR, IR, RAMAN, EPR, and electronic and photoelectron spectroscopy; electrochemical methods; and single-crystal X-ray diffraction.

Instructor(s): C. He Terms Offered: Winter

Prerequisite(s): CHEM 30100

#### CHEM 30400. Organometallic Chemistry. 100 Units.

This course covers preparation and properties of organometallic compounds (notably those of the transition elements, their reactions, and the concepts of homogeneous catalysis).

Instructor(s): G. Hillhouse Terms Offered: Autumn

Prerequisite(s): CHEM 20100

#### CHEM 30500. Nanoscale Materials. 100 Units.

This course provides an overview of nanoscale phenomena in metals, semiconductors, and magnetic materials (e.g., the fundamental aspects of quantum confinement in semiconductors and metals, superparamagnetism in nanoscale magnets, electronic properties of nanowires and carbon nanotubes, surface plasmon resonances in nanomaterials, photonic crystals). Special attention is paid to preparative aspects of nanomaterials, colloidal and gas-phase syntheses of nanoparticles, nanowires, and nanotubes. Engineered nanomaterials and their assemblies are considered promising candidates for a variety of applications, from solar cells, electronic circuits, light-emitting devices, and data storage to catalysts, biological tags, cancer treatments, and drug delivery. The course covers state-of-the art in these and other areas. Finally, the course provides an overview of the experimental techniques used for structural characterization of inorganic nanomaterials (e.g., electron microscopy, X-ray diffractometry, small-angle X-ray scattering, STM, AFM, Raman spectroscopy).

Instructor(s): D. Talapin Terms Offered: Spring

Prerequisite(s): CHEM 20200 and 26300, or consent of instructor

#### CHEM 30600. Chemistry of the Elements. 100 Units.

This course surveys the descriptive chemistries of the main-group elements and the transition metals from a synthetic perspective, and reaction chemistry of inorganic molecules is systematically developed.

Instructor(s): D. Talapin Terms Offered: Winter

Prerequisite(s): CHEM 20100

#### CHEM 30900. Bioinorganic Chemistry. 100 Units.

This course covers various roles of metals in biology. Topics include coordination chemistry of bioinorganic units, substrate binding and activation, electron-transfer proteins, atom and group transfer chemistry, metal homeostasis, ion channels, metals in medicine, and model systems.

Instructor(s): C. He Terms Offered: Spring Prerequisite(s): CHEM 20200 and 22200/23200

#### CHEM 31100. Supramolecular Chemistry. 100 Units.

This course develops the concepts of supramolecular chemistry (both organic and metal-based systems) and its applications. Coordination chemistry is introduced as a background to metal-based supramolecular systems. The chemistry and physical properties of transition metal complexes are presented, including crystal field theory, molecular orbital theory, magnetism, and electronic spectra. The mechanisms by which molecular motors operate are presented and reference is made to synthetic systems that attempt to emulate biological molecular motors.

Terms Offered: Not offered in 2013-14

Prerequisite(s): CHEM 20200 and 22200/23200

#### CHEM 32100. Physical Organic Chemistry I. 100 Units.

This course focuses on the quantitative aspects of structure and reactivity, molecular orbital theory, and the insight it provides into structures and properties of molecules, stereochemistry, thermochemistry, kinetics, substituent and isotope effects, and pericyclic reactions.

Instructor(s): J. Lewis Terms Offered: Autumn

Prerequisite(s): CHEM 22200/23200 and 26200, or consent of instructor

### CHEM 32200. Organic Synthesis and Structure. 100 Units.

This course considers the mechanisms, applicability, and limitations of the major reactions in organic chemistry, as well as of stereochemical control in synthesis.

Instructor(s): V. Rawal Terms Offered: Autumn

Prerequisite(s): CHEM 22200/23200 or consent of instructor

#### CHEM 32300. Tactics of Organic Synthesis. 100 Units.

This course discusses the important classes for organic transformation. Topics include carbon-carbon bond formation; oxidation; and reduction using a metal, nonmetal, or acid-base catalyst. We also cover design of the reagents and the scope and limitation of the processes.

Instructor(s): V. Rawal Terms Offered: Winter

Prerequisite(s): CHEM 22200/23200 or consent of instructor

# CHEM 32400. Physical Organic Chemistry II. 100 Units.

Topics covered in this course include the mechanisms and fundamental theories of free radicals and the related free radical reactions, biradical and carbene chemistry, and pericyclic and photochemical reactions.

Terms Offered: Not offered in 2013-14

Prerequisite(s): CHEM 32100

#### CHEM 32500. Bioorganic Chemistry. 100 Units.

A goal of this course is to relate chemical phenomena with biological activities. We cover two main areas: (1) chemical modifications of biological macromolecules and their potential effects; and (2) the application of spectroscopic methods to elucidate the structure and dynamics of biologically relevant molecules.

Terms Offered: Not offered in 2013-14 Equivalent Course(s): BCMB 32500

# CHEM 32900. Polymer Chemistry. 100 Units.

This course introduces a broad range of polymerization reactions and discusses their mechanisms and kinetics. New concepts of polymerization and new materials of current interest are introduced and discussed. We also discuss the physical properties of polymers, ranging from thermal properties to electrical and optical properties in both a solution state and a solid state. Our emphasis is on structure/property relationship.

Terms Offered: Not offered in 2013-14

Prerequisite(s): CHEM 22200/23200 and 26300

## CHEM 33000. Complex Chemical Systems. 100 Units.

This course describes chemical systems in which nonlinear kinetics lead to unexpected (emergent) behavior of the system. Autocatalytic and spatiotemporal pattern forming systems are covered, and their roles in the development and function of living systems are discussed.

Terms Offered: Not offered in 2013-14

Prerequisite(s): CHEM 22200/23200 and MATH 20100, or consent of instructor

#### CHEM 33100. New Synthetic Reactions and Catalysts. 100 Units.

This course presents recent highlights of new synthetic reactions and catalysts for efficient organic synthesis. Mechanistic details and future possibilities are discussed.

Terms Offered: Not offered in 2013-14

Prerequisite(s): CHEM 23300

# CHEM 33200-33300. Chemical Biology I-II.

This course emphasizes the concepts of physical organic chemistry (e.g., mechanism, molecular orbital theory, thermodynamics, kinetics) in a survey of modern research topics in chemical biology. Topics, which are taken from recent literature, include the roles of proteins in signal transduction pathways, the biosynthesis of natural products, strategies to engineer cells with novel functions, the role of spatial and temporal inhomogeneities in cell function, and organic synthesis and protein engineering for the development of molecular tools to characterize cellular activities.

#### CHEM 33200. Chemical Biology I. 100 Units.

Instructor(s): S. Kozmin Terms Offered: Winter

Prerequisite(s): Basic knowledge of organic chemistry and biochemistry

### CHEM 33300. Chemical Biology II. 100 Units.

Instructor(s): S. Kent Terms Offered: Spring

Prerequisite(s): Basic knowledge of organic chemistry and biochemistry

#### CHEM 33300. Chemical Biology II. 100 Units.

Instructor(s): S. Kent Terms Offered: Spring

Prerequisite(s): Basic knowledge of organic chemistry and biochemistry

#### CHEM 33400. High-Throughput Methods in Chemistry. 100 Units.

The course focuses on discovery of reactions, bioactive compounds, and materials by construction of chemical libraries and screening them for desired properties.

Terms Offered: Not offered in 2013-14

#### CHEM 35000. Intro To Research: Chemistry. Var Units.

For course description contact Chemistry.

#### CHEM 36100. Wave Mechanics and Spectroscopy. 100 Units.

This course presents the introductory concepts, general principles, and applications of wave mechanics to spectroscopy.

Instructor(s): K. Freed Terms Offered: Autumn

Prerequisite(s): CHEM 26300

#### CHEM 36200. Quantum Mechanics. 100 Units.

This course builds upon the concepts introduced in CHEM 36100 with greater detail provided for the role of quantum mechanics in chemical physics.

Instructor(s): D. Mazziotti Terms Offered: Winter

Prerequisite(s): CHEM 36100

### CHEM 36300. Statistical Thermodynamics. 100 Units.

This course covers the thermodynamics and introductory statistical mechanics of systems at equilibrium.

Instructor(s): A. Dinner Terms Offered: Autumn

Prerequisite(s): CHEM 26100-26200

#### CHEM 36400. Advanced Statistical Mechanics. 100 Units.

Topics covered in this course may include statistics of quantum mechanical systems, weakly and strongly interacting classical systems, phase transitions and critical phenomena, systems out of equilibrium, and polymers.

Instructor(s): D. Mazziotti Terms Offered: Winter

Prerequisite(s): CHEM 36300 or equivalent

#### CHEM 36500. Chemical Dynamics. 100 Units.

This course develops a molecular-level description of chemical kinetics, reaction dynamics, and energy transfer in both gases and liquids. Topics include potential energy surfaces, collision dynamics and scattering theory, reaction rate theory, collisional and radiationless energy transfer, molecule-surface interactions, Brownian motion, time correlation functions, and computer simulations.

Instructor(s): S. Sibener Terms Offered: Spring

Prerequisite(s): CHEM 36100 required; 36300 recommended

#### CHEM 36800. Advanced Computational Chemistry and Biology. 100 Units.

The theme for this course is the identification of scientific goals that computation can assist in achieving. The course is organized around the examination of exemplary problems, such as understanding the electronic structure and bonding in molecules and interpreting the structure and thermodynamic properties of liquids. The lectures deal with aspects of numerical analysis and with the theoretical background relevant to calculations of the geometric and electronic structure of molecules, molecular mechanics, molecular dynamics, and Monte Carlo simulations. The lab consists of computational problems drawn from a broad range of chemical and biological interests. L.

Instructor(s): K. Freed Terms Offered: Not offered in 2013-14

Prerequisite(s): CHEM 26100-26200, or PHYS 19700 and 23400

Note(s): This course may not be used to meet requirements for the BS degree.

#### CHEM 36900. Materials Chemistry. 100 Units.

This course covers structural aspects of colloidal systems, surfactants, polymers, diblock copolymers, and self-assembled monolayers. We also cover the electronic properties associated with organic conducting polymers, organic light-emitting devices, and transistors. More novel topics of molecular electronics, nanotubes, quantum dots, and magnetic systems are also covered. The aim of the course is to provide a broad perspective of the various contributions of chemistry to the development of functional materials.

Terms Offered: Not offered in 2013-14

## CHEM 37100. Advanced Spectroscopies. 100 Units.

This linear and nonlinear spectroscopy course includes notions on matter-radiation interaction, absorption, scattering, and oscillator strength. They are applied mostly with the optical range, but we briefly touch upon microwave (NMR, ESR) and X-rays at the extreme. We cover nonlinear optical processes such as coherent Raman, harmonic, and sum-frequency; induced transparency; slow light; and X-ray generation. We also cover coherent and incoherent dynamical probes, such as pump-probe, echos, and two-dimensional spectroscopy.

Terms Offered: Not offered in 2013-14

#### CHEM 37200. Statistical Mechanics of Polymers/Glasses. 100 Units.

The material in this course is designed to describe the basic statistical mechanics of polymers in dilute and semi-dilute solutions, including the use of path integrals and renormalization group methods. Lattice models are used to describe polymer melts and blends, focusing on miscibility and the descent into glass formation.

Terms Offered: Not offered in 2013-14 Prerequisite(s): CHEM 36400 or equivalent

#### CHEM 38700. Biophysical Chemistry. 100 Units.

This course develops a physicochemical description of biological systems. Topics include macromolecules, fluid-phase lipid-bilayer structures in aqueous solution, biomembrane mechanics, control of biomolecular assembly, and computer simulations of biomolecular systems.

Terms Offered: Not offered 2013-14

#### CHEM 51100. Scientific Methods and Ethics. 100 Units.

This course prepares students for independent research by introducing them to the general methodology of scientific research.

Terms Offered: Not offered in 2013-14



# DEPARTMENT OF COMPUTER SCIENCE

#### Chair

- Todd Dupont Professors
- Yali Amit
- · Laszlo Babai
- · Andrew Chien
- Todd Dupont
- Ian Foster
- · John Goldsmith
- Stuart A. Kurtz
- · John Lafferty
- Ketan Mulmuley
- Michael J. O Donnell
- Alexander Razborov
- John Reppy
- L. Ridgway Scott
- Janos Simon
- · Robert I. Soare
- Rick L. Stevens Associate Professors
- Anne Rogers
   Assistant Professors
- Haryadi Gunawi
- Nina Hinrichs
- Henry Hoffman (as of 1/1/13)
- Gordon Kindlmann
- Risi Kondor
   Adjunct faculty
- Geraldine Brady (adjunct assistant professor)
- Todd Nugent (adjunct assistant professor)
- Mark Shacklette (adjunct professor)
- Andrew R Siegel (adjunct associate professor)
- Michael Spertus (adjunct associate professor)

The Department of Computer Science is dedicated to advancing and improving the knowledge, understanding, and practice of computer science through basic research and education

#### RESEARCH

We construe the field of computer science broadly to include the complementary concepts of computation, information, and communication. We employ modes of inquiry and creation from pure mathematics to experiment and observation to design and engineering. We investigate computation, information, and communication as inherently interesting phenomena; we also investigate the many ways in which computational concepts engage other topics: computational tools for science and scholarship, computational infrastructure for society.

Our current research may be classified into artificial intelligence, computational mathematics, scientific computing, systems, and theoretical computer science.

#### ARTIFICIAL INTELLIGENCE

We use language, vision, and learning as the organizing themes driving work in artificial intelligence.

#### COMPUTATIONAL MATHEMATICS

Our faculty and students study the foundations of simulation technology. This includes the development and mathematical analysis of numerical algorithms for approximating partial differential equations. We also study language and systems aspects of numerical computing, as exemplified in the FEniCS Project. Parallel and high performance computing are an integral part of our efforts.

#### SYSTEMS

Our faculty advance principles and understanding of a broad range of areas, including systems and networking, programming languages and software engineering, software and hardware architecture, data-intensive computing and databases, graphics and visualization, and systems biology. Particular areas of focus include formal definition, design, and implementation of programming languages, data-intensive computing systems and algorithms, large scale distributed and collaborative systems, heterogeneous computer architectures, reliable computing systems, and self-tuning systems.

#### THEORETICAL COMPUTER SCIENCE

We investigate the fundamental descriptive and algorithmic concepts underlying the computational process and the intrinsic limitations to efficient computation. Our faculty specialize in complexity theory, computational geometry, algorithms, discrete random processes, distributed computing, combinatorics, computability theory, and programming language semantics.

In addition to these more traditional areas, we have a growing commitment to research in applied computing. Examples include: developing mathematical and computational methods to measure and graphically depict structure in three-dimensional imaging modalities (like MRI and CT) and combining molecular

dynamics simulations with chemical experimental data to gain an understanding of the motions and kinetics of biological molecules.

These efforts are enhanced by strong connections to the Computation Institute, which develops computational tools and techniques for a broad range of disciplines, including biological and physical sciences, medicine, law, the arts, and humanities; the James Franck Institute, which focuses on condensed matter physics; and the Institute for Biophysical Dynamics, which provides a forum for studying questions that arise at the boundary between the biological and physical sciences. In addition, we have collaborations with faculty in academic departments, including the geophysical sciences, linguistics, mathematics, physics, psychology, and statistics, as well as with the Division of Mathematics and Computer Science at Argonne National Laboratory (ANL), which is operated by the University of Chicago for the US Department of Energy.

# GRADUATE PROGRAMS

We offer two graduate curricula in computer science.

- 1. A graduate professional curriculum leading to the Master of Science (S.M.) degree, for students who wish to enter or advance themselves in computer science practice.
- A graduate research curriculum leading to the Ph.D. degree that prepares students to perform advanced basic research in computer science either in industry or academia. Teaching experience is available for students preparing for academic careers.

Acquire further information about our Professional Programs through our website http://masters.cs.uchicago.edu/, by writing to our CSPP Admissions, Department of Computer Science, University of Chicago, 1100 East 58th Street, Chicago, IL 60637, or by telephoning 773 834 3388. You may also email any questions to our questions@cs.uchicago.edu email address.

Acquire further information about our program through the Web at http://www.cs.uchicago.edu/, by writing to Admissions, Department of Computer Science, University of Chicago, 1100 East 58th Street, Chicago, IL 60637, or by telephoning (773) 702-6011.

# THE PH.D. PROGRAM

The department offers two Ph.D. tracks: a standard track and a computational mathematics track.

The detailed requirements for the Ph.D. degree and for the S.M. degree within the Ph.D. program can be found by visiting the Department's web page at http://www.cs.uchicago.edu/. Here is a brief summary:

To obtain an S.M. degree within the Ph.D. program, students in the Ph.D. program must fulfill the following requirements:

Course requirements. Complete a course on Big Ideas in Computer Science, five
core courses, and three electives. The core courses include two in Theory, two in
Systems, and one in Artificial Intelligence. Please refer to the web page for details
regarding the core courses.

A modified set of core courses applies to the computational mathematics track (see the web site). The list of electives is frequently updated; we refer you to the web page.

Students must complete the course requirements by the end of their second year of study. To receive an S.M. degree within the Ph.D. program, students must receive a grade of at least B in all the nine courses and have a GPA of at least 3.00 in the five core courses, and write a Master's paper and pass a Master's examination.

To obtain a Ph.D. degree, students must meet enhanced S.M. requirements, including at least B on each of the nine courses and a GPA of at least 3.25 on the five core courses; plus the following:

- · Pass a Candidacy exam
- Write and defend a Doctoral Thesis that contains significant original research in computer science.

# FINANCIAL AID FOR STUDENTS IN THE PH.D. PROGRAM

We expect to support all students who make satisfactory progress toward a doctorate. This support includes full tuition and a monthly stipend during the academic year that is competitive with offers made by other top ranked schools. To earn their stipends, students will have to perform part time work for the department as teaching assistants, research assistants, members of the technical staff, etc. The department also encourages prospective students to apply for all externally funded grants and fellowships for which they qualify.

# ADMISSION TO THE PH.D. PROGRAM

While most of our graduate students have majored in computer science or mathematics as undergraduates, applicants with other backgrounds have also been successful in our department. Students will succeed in the program if they are motivated to do research and have a strong general intellectual preparation to study in a particular field of computer science.

Students also need a reasonable foundation in mathematics, including calculus and linear algebra.

The required background for students depends on their intended area of specialization.

 Applicants who expect to specialize in theoretical computer science or computational mathematics will need a more substantial mathematics background that includes advanced proof-based courses such as analysis, abstract algebra, probability and measure theory, logic, topology.

- Applicants who expect to work in artificial intelligence (AI) will also want to have had some background in cognition, such as linguistics, cognitive psychology, or AI
- Applicants interested in systems should have a solid undergraduate grounding in algorithms, data structures, programming languages, architecture, operating systems, and networking.
- Applicants interested in more application-oriented areas such as computational biology and visualization should have a more diverse background, including familiarity with topics such as signal processing, applied mathematics, computer graphics, or statistics.

The department encourages all potential students to take an advanced test of the Graduate Record Examination (GRE). That advanced test does not need to be in computer science or mathematics, although these are generally the most helpful. In certain areas, such as Theory or AI, a mathematics GRE tends to be more helpful than a computer science GRE.

# TEACHING OPPORTUNITIES FOR STUDENTS IN THE PH.D. PROGRAM

The department takes its undergraduate teaching responsibilities very seriously, and offers supervised teaching opportunities, including lecturing, acting as teaching assistants, and working as lab assistants to its best graduate students. The program allows students to develop their teaching abilities and gain significant classroom experience.

# COMPUTING FACILITIES

In addition to general University computing facilities and our Undergraduate Computing Laboratory (which contains about four dozen Macintosh computers and two dozen Linux workstations with extensive peripherals and software), the Ryerson Research Computing Service provides the faculty, students, and postdoctoral associates in computer science with computing resources. We have the flexibility to adapt quickly to new research needs.

The resources include: 24 hour 7 day interactive computing services on a number of shared Unix/Linux computing servers and workstations interconnected by high speed ethernet; a workstation on each desktop (a total of more than 200 workstations); wireless connections; substantial amounts of personal file storage, backed up nightly for reliability and accessible transparently from all departmental computers; printer service; web servers and access to the Internet; Linux clusters for research in parallel computing and High Performance Computing. The department also has access to highly parallel machines at ANL.

#### COURSES

For the list of courses offered and the course descriptions, please consult the departmental web page at http://www.cs.uchicago.edu/courses.

#### COMPUTER SCIENCE COURSES

# CMSC 31100. Big Ideas in Computer Science. 100 Units.

This course introduces many of the important concepts in the broad area of computer science. Each week a different professor gives a three-lecture sequence on a big idea in their field of specialty. Previous ideas have included undecidability, randomness, cryptography, stability of numerical algorithms, structural operational semantics, software engineering, and the Internet.

Terms Offered: Autumn

Prerequisite(s): Consent of department counselor and instructor

# CMSC 32001. Topics in Programming Languages. 100 Units.

This course covers a selection of advanced topics in programming languages.

Terms Offered: Autumn, Winter, Spring

Prerequisite(s): Consent of department counselor and instructor

# CMSC 32201. Topics in Computer Architecture. 100 Units.

This course covers a selection of advanced topics in computer architecture.

Terms Offered: Autumn, Winter, Spring

Prerequisite(s): Consent of department counselor and instructor

# CMSC 32620. Implementation of Computer Languages II. 100 Units.

This course is a continuation of CMSC 22610, covering compilers for general-purpose languages. Topics include compiler-immediate representations, continuation-passing style, runtime representations, code generation, code optimization, register allocation, instruction scheduling, and garbage collection. This is a project-based course in which students construct a complete, working compiler for a small language using Standard ML.

Terms Offered: Spring. Not offered 2013-14.

Prerequisite(s): CMSC 22610 required; CMSC 22100 strongly recommended

Note(s): Generally offered alternate years.

Equivalent Course(s): CMSC 22620

# CMSC 33300. Networks and Distributed Systems. 100 Units.

This course focuses on the principles and techniques used in the development of networked and distributed software. Topics include programming with sockets; concurrent programming; data link layer (Ethernet, packet switching, etc.); internet and routing protocols (UDP, TCP); and other commonly used network protocols and techniques. This is a project-oriented course in which students are required to develop software in C on a UNIX environment.

Instructor(s): B. Sotomayor Terms Offered: Winter

Prerequisite(s): CMSC 15400

Equivalent Course(s): CMSC 23300

# CMSC 33310. Advanced Distributed Systems. 100 Units.

This course explores advanced topics in distributed systems. Topics include supercomputing (architectures, applications, programming models, etc.); grid computing with an emphasis on Globus technologies; Infrastructure-as-a-Service clouds (virtual infrastructure management, Amazon EC2, etc.), Platform-as-a-Service clouds (Google App Engine, etc.), and the Software-as-a-Service model; and other current topics related to using and building distributed systems. The course includes a substantial practical component but also requires students to read papers and articles on current advances in the field.

Instructor(s): B. Sotomayor Terms Offered: Spring Prerequisite(s): CMSC 23300 or consent of instructor

Equivalent Course(s): CMSC 23310

# CMSC 33400. Mobile Computing. 100 Units.

Mobile computing is proliferating at an extraordinary pace and changing nearly every aspect of society. Increased sensing and awareness capabilities of mobile devices have triggered a radical transformation of the modalities of interaction and applications. Mobile devices are also reshaping many aspects of computing—usage, networking, interface, computing models, etc. We explore elements of the core and emerging technologies underlying mobile computing. Past focus areas include visual experience, computational photography, augmented reality, synchronicity and proximity for shared social experiences. Students engage in a series of labs which expose them to elements of the software and hardware capabilities of mobile computing systems, and develop the capability to envision radical new applications. Students engage in extensive experiments and a large-scale project. Where possible, project teams are mentored by domain experts to shape their projects for greater impact.

Instructor(s): A. Chien Terms Offered: Winter

Prerequisite(s): CMSC 23000 or 23300 or equivalent are required.

Equivalent Course(s): CMSC 23400

# CMSC 33501. Topics in Databases. 100 Units.

This course covers a selection of advanced topics in database systems.

Terms Offered: Autumn, Winter, Spring

Prerequisite(s): Consent of department counselor and instructor

#### CMSC 33600. Type Systems for Programming Languages. 100 Units.

This course covers the basic ideas of type systems, their formal properties, their role in programming language design, and their implementation. Exercises involving design and implementation explore the various options and issues.

Terms Offered: Winter

Prerequisite(s): Consent of department counselor

Note(s): CMSC 22100 recommended.

#### CMSC 33710. Scientific Visualization. 100 Units.

Scientific visualization combines computer graphics, numerical methods, and mathematical models of the physical world to create a visual framework for understanding and solving scientific problems. The mathematical and algorithmic foundations of scientific visualization (for scalar, vector, and tensor fields) will be explained in the context of real-world data from scientific and biomedical domains. The course is also intended for students outside computer science who are experienced with programming and scientific computing on scientific data. Programming projects will be in C.

Instructor(s): G. Kindlmann Terms Offered: Winter

Prerequisite(s): Strong programming skills and basic knowledge of linear algebra and calculus

Note(s): This course is offered in alternate years.

#### CMSC 34000. Scientific Parallel Computing. 100 Units.

This course covers the use of multiple processors cooperating to solve a common task, as well as related issues in computer architecture, performance analysis, prediction and measurement, programming languages, and algorithms for large-scale computation. Programming at least one parallel computer is required. Possibilities include one of the clusters of workstations connected by high-speed networks on campus. We focus on state-of-the-art parallel algorithms for scientific computing. Topics are based on interest. General principles of parallel computing are emphasized.

Instructor(s): L. R. Scott Terms Offered: Autumn

Prerequisite(s): Consent of department counselor and instructor required;

experience in scientific computing recommended Note(s): This course is offered in alernate years.

# CMSC 34200. Numerical Hydrodynamics. 100 Units.

This course covers numerical methods for the solution of fluid flow problems. We also make a theoretical evaluation of the methods and experimental study based on the opinionated book Fundamentals of Computational Fluid Dynamics by Patrick J. Roache.

Instructor(s): T. Dupont Terms Offered: Winter

Prerequisite(s): Consent of department counselor. Ability to program; and familiarity with elementary numerical methods and modeling physical systems by systems of differential equations

#### CMSC 34710. Wireless Sensor Networks. 100 Units.

This course introduces the concepts and technologies for building embedded systems and wireless sensors nets by focusing on four areas: low-power hardware, wireless networking, embedded operating systems, and sensors. Two assignments provide hands-on experience by deploying small wireless sensor motes running TinyOS to form an ad-hoc peer-to-peer network that can collect environmental data and forward it back to an 802.11b-equiped embedded Linux module. Students also read and summarize papers, participate in classroom discussions, and work on a team research project.

Instructor(s): R. Stevens

Prerequisite(s): Consent of department counselor. Graduate-level understanding of Unix/Linux operating systems, networking, computer architecture, and programming

#### CMSC 35000. Introduction to Artificial Intelligence. 100 Units.

This course introduces the theoretical, technical, and philosophical aspects of Artificial Intelligence. We emphasize computational and mathematical modes of inquiry into the structure and function of intelligent systems. Topics include learning and inference, speech and language, vision and robotics, and reasoning and search.

# CMSC 35050. Computational Linguistics. 100 Units.

This course introduces the problems of computational linguistics and the techniques used to deal with them, focusing primarily on probabilistic models and techniques. Topics are drawn primarily from phonology, morphology, and syntax. Special topics include automatic learning of grammatical structure and the treatment of languages other than English.

Instructor(s): J. Goldsmith Terms Offered: Winter

Prerequisite(s): CMSC 12200, 15200 or 16200, or competence in a programming language

Equivalent Course(s): CMSC 25020, LING 28600, LING 38600

#### CMSC 35100. Natural Language Processing. 100 Units.

This course introduces the theory and practice of natural language processing, with applications to both text and speech. Topics include regular expressions, finite state automata, morphology, part of speech tagging, context free grammars, parsing, semantics, discourse, and dialogue. Symbolic and probabilistic models are presented. Techniques for automatic acquisition of linguistic knowledge are emphasized.

# CMSC 35400. Machine Learning. 100 Units.

This course provides hands-on experience with a range of contemporary machine learning algorithms, as well as an introduction to the theoretical aspects of the subject. Topics covered include: the PAC framework, elements of computational learning theory, the VC dimension, boosting, Bayesian learning, graphical models, clustering, dimensionality reduction, linear classifiers, kernel methods including SVMs, and an introduction to statistical learning theory.

Terms Offered: Spring

Prerequisite(s): CMSC 25400 or consent of instructor

Equivalent Course(s): STAT 37710

#### CMSC 35500. Computer Vision. 100 Units.

This course covers deformable models for detecting objects in images. Topics include one-dimensional models to identify object contours and boundaries; two-dimensional models for image matching; and sparse models for efficient detection of objects in complex scenes. Mathematical tools needed to define the models and associated algorithms are developed. Applications include detecting contours in medical images, matching brains, and detecting faces in images. Neural network implementations of some of the algorithms are presented, and connections to the functions of the biological visual system are discussed.

Instructor(s): Y. Amit

Equivalent Course(s): CMSC 25050,STAT 37900

# CMSC 35900. Topics in Artificial Intelligence. 100 Units.

This course covers topics in artificial intelligence.

Terms Offered: Autumn, Winter, Spring

Prerequisite(s): Consent of department counselor and instructor

# CMSC 36500. Algorithms in Finite Groups. 100 Units.

We consider the asymptotic complexity of some of the basic problems of computational group theory. The course demonstrates the relevance of a mix of mathematical techniques, ranging from combinatorial ideas, the elements of probability theory, and elementary group theory, to the theories of rapidly mixing Markov chains, applications of simply stated consequences of the Classification of Finite Simple Groups (CFSG), and, occasionally, detailed information about finite simple groups. No programming problems are assigned.

Instructor(s): L. Babai Terms Offered: Spring

Prerequisite(s): Consent of department counselor. Linear algebra, finite fields, and a first course in group theory (Jordan-Holder and Sylow theorems) required; prior knowledge of algorithms not required

Note(s): This course is offered in alternate years.

Equivalent Course(s): MATH 37500

# CMSC 37000. Algorithms. 100 Units.

The focus of this course is the analysis and design of efficient algorithms, with emphasis on ideas rather than on implementation. Algorithmic questions include sorting and searching, discrete optimization, algorithmic graph theory, algorithmic number theory, and cryptography. Design techniques include "divide-and-conquer" methods, dynamic programming, greedy algorithms, and graph search, as well as the design of efficient data structures. Methods of algorithm analysis include asymptotic notation, evaluation of recurrent inequalities, the concepts of polynomial-time algorithms, and NP-completeness.

Instructor(s): L. Babai Terms Offered: Winter

Prerequisite(s): Consent of instructor.

# CMSC 37100. Topics in Algorithms. 100 Units.

This course covers current topics in algorithms.

Terms Offered: Autumn, Winter, Spring

Prerequisite(s): Consent of department counselor. CMSC 27200 or consent of

instructor.

#### CMSC 37110. Discrete Mathematics. 100 Units.

This course emphasizes mathematical discovery and rigorous proof, illustrated on a variety of accessible and useful topics, including basic number theory, asymptotic growth of sequences, combinatorics and graph theory, discrete probability, and finite Markov chains. This course includes an introduction to linear algebra.

Instructor(s): L. Babai Terms Offered: Autumn

Prerequisite(s): Consent of department counselor and instructor

#### CMSC 37200. Combinatorics. 100 Units.

Methods of enumeration, construction, and proof of existence of discrete structures are discussed. The course emphasizes applications of linear algebra, number theory, and the probabilistic method to combinatorics. Applications to the theory of computing are indicated, and open problems are discussed.

Instructor(s): L. Babai Terms Offered: Winter

Prerequisite(s): Consent of department counselor. Linear algebra, basic combinatorics, or consent of instructor.

#### CMSC 37400. Constructive Combinatorics. 100 Units.

This course covers constructive combinatorial techniques in areas such as enumerative combinatorics, invariant theory, and representation theory of symmetric groups. Constructive techniques refer to techniques that have algorithmic flavor, such as those that are against purely existential techniques based on counting.

Instructor(s): K. Mulmuley Terms Offered: Spring

Prerequisite(s): Consent of department counselor. Advanced knowledge of mathematics and consent of instructor.

#### CMSC 37701. Topics in Bioinformatics. 100 Units.

This course covers current topics in bioinformatics.

Terms Offered: Autumn, Winter, Spring

Prerequisite(s): Consent of Consent of department counselor and instructor

# CMSC 37720. Computational Systems Biology. 100 Units.

This course introduces concepts of systems biology. We also discuss computational methods for analysis, reconstruction, visualization, modeling, and simulation of complex cellular networks (e.g., biochemical pathways for metabolism, regulation, and signaling). Students explore systems of their own choosing and participate in developing algorithms and tools for comparative genomic analysis, metabolic pathway construction, stoichiometeric analysis, flux analysis, metabolic modeling, and cell simulation. We also focus on understanding the computer science challenges in the engineering of prokaryotic organisms.

Instructor(s): R. Stevens Terms Offered: Autumn

Prerequisite(s): Consent of department counselor and instructor

#### CMSC 37800. Numerical Computation. 100 Units.

This course covers topics in numerical methods and computation that are useful in statistical research (e.g., simulation, random number generation, Monte Carlo methods, quadrature, optimization, matrix methods).

Terms Offered: Autumn. Not offered 2011-12.

Prerequisite(s): Consent of departmental counselor. STAT 34300 or consent of instructor.

Equivalent Course(s): STAT 30700

# CMSC 37810. Mathematical Computation I: Matrix Computation Course. 100 Units.

This is an introductory course on numerical linear algebra, which is quite different from linear algebra. We will be much less interested in algebraic results that follow from axiomatic definitions of fields and vector spaces but much more interested in analytic results that hold only over the real and complex fields. The main objects of interest are real- or complex-valued matrices, which may come from differential operators, integral transforms, bilinear and quadratic forms, boundary and coboundary maps, Markov chains, correlations, DNA microarray measurements, movie ratings by viewers, friendship relations in social networks, etc. Numerical linear algebra provides the mathematical and algorithmic tools for analyzing these matrices.

,Topics covered: basic matrix decompositions LU, QR, SVD; Gaussian elimination and LU/LDU decompositions; backward error analysis, Gram-Schmidt orthogonalization and QR/complete orthogonal decompositions; solving linear systems, least squares, and total least squares problem; low-rank matrix approximations and matrix completion. We shall also include a brief overview of stationary and Krylov subspace iterative methods; eigenvalue and singular value problems; and sparse linear algebra.

Terms Offered: Autumn

Prerequisite(s): Linear algebra (STAT 24300 or equivalent) and some previous experience with statistics

Equivalent Course(s): STAT 30900

# CMSC 37812. Mathematical Computation III: Numerical Methods for PDE's. 100 Units.

The first part of this course introduces basic properties of PDE's; finite difference discretizations; and stability, consistency, convergence, and Lax's equivalence theorem. We also cover examples of finite difference schemes; simple stability analysis; convergence analysis and order of accuracy; consistency analysis and errors (i.e., dissipative and dispersive errors); and unconditional stability and implicit schemes. The second part of this course includes solution of stiff systems in 1, 2, and 3D; direct vs. iterative methods (i.e., banded and sparse LU factorizations); and Jacobi, Gauss-Seidel, multigrid, conjugate gradient, and GMRES iterations.. Terms Offered: Spring

Prerequisite(s): Some prior exposure to differential equations and linear algebra Equivalent Course(s): STAT 31100

# CMSC 38000-38100. Computability Theory I-II.

The courses in this sequence are offered in alternate years.

#### CMSC 38000. Computability Theory I. 100 Units.

CMSC 38000 is concerned with recursive (computable) functions and sets generated by an algorithm (recursively enumerable sets). Topics include various mathematical models for computations (e.g., Turing machines and Kleene schemata, enumeration and s-m-n theorems, the recursion theorem, classification of unsolvable problems, priority methods for the construction of recursively enumerable sets and degrees).

Instructor(s): R. Soare Terms Offered: Winter

Prerequisite(s): Consent of department counselor. MATH 25500 or consent of instructor.

Equivalent Course(s): MATH 30200

#### CMSC 38100. Computability Theory II. 100 Units.

CMSC 38100 treats classification of sets by the degree of information they encode, algebraic structure and degrees of recursively enumerable sets, advanced priority methods, and generalized recursion theory.

Instructor(s): R. Soare Terms Offered: Winter, Spring

Prerequisite(s): Consent of department counselor. MATH 25500 or consent of instructor.

Equivalent Course(s): MATH 30300

#### CMSC 38100. Computability Theory II. 100 Units.

CMSC 38100 treats classification of sets by the degree of information they encode, algebraic structure and degrees of recursively enumerable sets, advanced priority methods, and generalized recursion theory.

Instructor(s): R. Soare Terms Offered: Winter, Spring

Prerequisite(s): Consent of department counselor. MATH 25500 or consent of instructor.

Equivalent Course(s): MATH 30300

# CMSC 38300. Numerical Solutions to Partial Differential Equations. 100 Units.

This course covers the basic mathematical theory behind numerical solution of partial differential equations. We investigate the convergence properties of finite element, finite difference and other discretization methods for solving partial differential equations, introducing Sobolev spaces and polynomial approximation theory. We emphasize error estimators, adaptivity, and optimal-order solvers for linear systems arising from PDEs. Special topics include PDEs of fluid mechanics, max-norm error estimates, and Banach-space operator-interpolation techniques. Instructor(s): L. R. Scott Terms Offered: Spring. This course is offered in alternate years.

Prerequisite(s): Consent of department counselor and instructor

Equivalent Course(s): MATH 38300

# CMSC 38410. Quantum Computing. 100 Units.

This course covers mathematical and complexity aspects of quantum computing, putting aside all questions pertaining to its physical realizability. Possible topics include: (1) quantum model of computation, quantum complexity classes, and relations to their classical counterparts; (2) famous quantum algorithms (including Shor and Grover); (3) black-box quantum models (lower and upper bounds); (4) quantum communication complexity (lower and upper bounds); and (5) quantum information theory.

Instructor(s): A. Razborov Terms Offered: Winter. This course is offered in alternate years.

Prerequisite(s): Consent of department counselor. Basic knowledge of computational complexity and linear algebra required; knowledge of quantum mechanics not required

#### CMSC 38500. Computability and Complexity Theory. 100 Units.

Part one of this course consists of models for defining computable functions: primitive recursive functions, (general) recursive functions, and Turing machines; the Church-Turing Thesis; unsolvable problems; diagonalization; and properties of computably enumerable sets. Part two of this course deals with Kolmogorov (resource bounded) complexity: the quantity of information in individual objects. Part three of this course covers functions computable with time and space bounds of the Turing machine: polynomial time computability, the classes P and NP, NP-complete problems, polynomial time hierarchy, and P-space complete problems. Instructor(s): A. Razborov Terms Offered: Winter

Prerequisite(s): Consent of department counselor and instructor

Equivalent Course(s): MATH 30500

# CMSC 38512. Kolmogorov Complexity. 100 Units.

This course introduces the theory of Kolmogorov Complexity with an emphasis on its use in theoretical computer science, mostly in computational complexity. If time permits, we may briefly touch on its uses in statics, prediction, and learning. Instructor(s): J. Simon Terms Offered: Autumn. Not offered 2012–13.

Prerequisite(s): Consent of department counselor and instructor

#### CMSC 38600. Complexity Theory A. 100 Units.

This course covers topics in computational complexity theory, with an emphasis on machine-based complexity classes.

Terms Offered: Spring

Prerequisite(s): Consent of department counselor and instructor

# CMSC 38700. Complexity Theory B. 100 Units.

This course covers topics in computational complexity theory, with an emphasis on combinatorial problems in complexity.

Instructor(s): A. Razborov Terms Offered: Spring. Not offered 2012-13.

Prerequisite(s): Consent of department counselor and instructor

#### CMSC 38815. Geometric Complexity. 100 Units.

This course provides a basic introduction to geometric complexity theory, an approach to the P vs. NP and related problems through algebraic geometry and representation theory. No background in algebraic geometry or representation theory will be assumed.

Instructor(s): K. Mulmuley Terms Offered: Autumn. This course is offered in alternate years.

Prerequisite(s): Consent of department counselor and instructor

Note(s): Background in algebraic geometry or representation theory not required Equivalent Course(s): MATH 38815

#### CMSC 39000. Computational Geometry. 100 Units.

This course is a seminar on topics in computational geometry.

Instructor(s): K. Mulmuley Terms Offered: Spring. This course is offered in alternate years.

#### CMSC 39600. Topics in Theoretical Computer Science. 100 Units.

This course is a seminar on current research in theoretical computer science.

Terms Offered: Autumn, Winter, Spring

Prerequisite(s): Consent of department counselor and instructor



# DEPARTMENT OF THE GEOPHYSICAL SCIENCES

#### Chair

- · Michael J. Foote **Professors**
- · David Archer
- · Andrew M. Davis
- · Michael J. Foote
- John E. Frederick
- · Lawrence Grossman
- · David Jablonski
- Susan M. Kidwell
- Michael C. LaBarbera, Organismal Biology & Anatomy
- Douglas R. MacAyeal
- · Michael J. Pellin
- Raymond T. Pierrehumbert
- · Frank M. Richter
- · David B. Rowley **Associate Professors**
- · Nicolas Dauphas
- Fred Ciesla
- Dion L. Heinz
- Noboru Nakamura
- Mark Webster **Assistant Professors**
- Maureen Coleman
- · Albert S. Colman
- · Elisabeth J. Moyer
- Jacob Waldbauer
  - **Emeritus Faculty**
- Alfred T. Anderson, Jr. Victor Barcilon
- Roscoe R. Braham, Jr.
- Robert N. Clayton
- · Paul B. Moore
- Robert C. Newton
- David Raup

- · William H. Reid
- Ramesh C. Srivastava
- · Alfred M. Ziegler

# Program of Graduate Study

#### OVERVIEW AND PHILOSOPHY

The department serves graduate students who seek the Ph.D. in earth, planetary, geological and environmental sciences and the paleontological and paleobiological disciplines of biological and historical sciences broadly conceived.

The Ph.D. signifies the graduate's mastery of the problems, techniques and knowledge covering the full spectrum of intellectual pursuit in the many disciplines listed above. The degree additionally acknowledges the candidate's contribution to specialized knowledge through original research conducted in experimental, observational and theoretical venues. The M.S. is also awarded to graduate students in the program, and is given in recognition of post-undergraduate scholarship. Students considering the program of graduate study should realize, however, that it is conceived primarily for study and research leading to the Ph.D.

The Department of Geophysical Sciences was created in 1961 when the departments of geology and meteorology of the university were united to better embrace the multidisciplinary nature of research and scholarship applied to earth, its place in the cosmos and its environmental and biological history. The precursor Department of Geology was founded in the 1890's and reflected the University of Chicago's distinctively modern philosophy toward education and research. What is today lauded as new, namely the approach to physical, chemical, biological and natural science of earth that values connections and multidisciplinary ways of thinking, was the original organizing principle of the university's activities in earth science at the time the university was first created. Faithful to its original conception, the department is exemplified today by the diverse, yet interactive, composition of the faculty, students and research activities.

Our program distinguishes itself from those at other institutions through our rigorous adherence to a principle that the path to knowledge in earth sciences is best traveled when disciplinary ways of thinking are applied interactively. To follow this path, our students and faculty engage each other in a constant exchange of ideas that spans a variety of specialized interests and disciplines. Indeed, the range of specialized interests and disciplines encompassed by our single intimate community is, at typical universities elsewhere, housed in separate departments. The exchange of ideas our community offers is both literal (as when research techniques from one discipline are applied in another) and figurative (as when students of diverse background and interests attend a common seminar), and is marshaled through our philosophical view that intellectual power is drawn from many sources. The tension created by bringing together disparate disciplines with differing traditions leads to constructive discourse in our community.

#### AREAS OF STUDY

Research, classroom teaching and seminar activity in the program reflect the long tradition of esteem directed toward multidisciplinary knowledge. Graduate study and research today thus ranges from geochemical approaches to nucleosynthesis and planet forming cosmochemistry to geomorphology, from evolutionary paleobiology to multi cellular automata, and from oceanic conveyor-belt circulation systems and biogeochemical cycles to subduction zone petrology. Graduate students are exposed to the breadth of intellectual activity in the physical and natural science of the earth through courses they take during their first two years of study and through weekly attendance of seminars where both faculty and visiting scientists present research lectures. Graduate students are expected to develop two skills. First is the ability to conduct scientific discourse across the full range of disciplines. Second is the ability to conduct original research leading to unique contributions in an area of specialization.

Research and teaching within the program is further amplified by associations with other groups within the university. The most notable programs allied with ours are: the committee on evolutionary biology (CEB, research on the evolution of life), the chemistry department (research on atmospheric and environmental chemistry), the materials research lab (research on planetary and interplanetary materials at high pressure and temperature), the Argonne National Lab (environmental chemistry, advanced computing, the advanced photon source, CARS), the environmental science program (teaching and public policy debate) and the environmental statistics program (analysis of environmental trends).

#### STUDENT ADVISING

A distinctive element in the everyday life of the department is the mentoring relationship the faculty of the department provide for students of the program. In our program, students are regarded as colleagues, not subordinates. Students participate in an apprenticeship which is designed to teach through active learning both the tangible and intangible professional skills needed of a scientist. Students are guided in their learning and research activities by mentorship engaging both the program faculty and fellow students. This mentorship oversees both the course work activity and the student's research, and is conceived as a means of establishing the student as a full partner in research and scholarship. Formal mentoring activities involve regular academic advisory committee meetings that include a combination of faculty covering the student's field of specialty and faculty covering allied fields where cross disciplinary exchange of ideas or techniques may prove helpful to the student's progress. In addition to formal activities, mentoring also proceeds along informal avenues: the department faculty prides itself in maintaining an open door atmosphere, where students seeking help or advice can readily find it down the hall.

#### RESEARCH

Dissertation research can address any aspect of physical, chemical, biological and natural sciences of the earth, its life and environment, and the solar system environment from which the planets were formed. Typically, dissertation research begins in the second year of the student's residence after courses taken

in preparation for the preliminary examination have been completed and an oral research prospectus has been defended.

#### TEACHING, OUTREACH AND PROFESSIONAL SKILLS DEVELOPMENT

Young scientists are faced with an ever increasing demand for breadth in the scope of their professional skills: from teaching to proposal writing, and from website design to mountaineering. To help prepare our students for the varied challenges they will encounter in their post graduate career, we involve them to the maximum extent possible in teaching, research planning, public outreach and field activity. While there are no strict requirements for teaching activities, the majority of our students participate in at least some teaching as laboratory assistants for the large, undergraduate-level classes taught by our faculty. Typical demands on a graduate student's time might involve four to eight hours a week of student contact time, and four to six hours a week of preparation and grading. To emphasize the value the university places on graduate student participation in undergraduate teaching, a slightly larger stipend is provided to teaching assistants over research assistants. In addition to teaching, our graduate students typically become involved in the scientific funding process through exposure to the efforts undertaken by faculty in the securing of research funds through the writing of proposals. Public outreach is also an important element of professional skills, and is emphasized through scientific web site development (required by funding agencies for grants funded in support of scientific research) and other activities (e.g., local science fairs and lectures at surrounding schools) which emphasize contact with the general public. Many of our graduate students engage in deep-field activity in various parts of the world. Field activities in the recent past have included dive trips to Central America for taphonomic research, fossil collecting expeditions to the St. Elias Mountains, and glaciological survey work on the Ross Ice Shelf and its icebergs.

#### **CURRICULUM**

The diversity of intellectual pursuit encompassed by the program places students and faculty into a challenging position when confronted with the need to design a curriculum capable of preparing students of the program to become Ph.D. scientists. Our approach to this challenge is to focus on thinking tools that prepare students for research. Thinking tools embody knowledge of methodologies, awareness of fundamental scientific problems, understanding of current research areas and creative thought when encountering difficult questions. These tools are taught, in part, by a curriculum of courses that delve deeply into various subsets of knowledge covered by the department's scholarly interests. While a student may enter the program with the ultimate goal of writing a dissertation in one area of specialization, courses taken in closely allied areas of specialization are often, by virtue of practicality, all that our curriculum offers. While this may seem detrimental to progress toward specialized research, in practice, the specific subject material used to build the student's base of knowledge and rigorous understanding of thought and methodologies is not strongly correlated with the student's subsequent success. Our curriculum of courses thus focuses on teaching

notions of understanding and methodologies that are universal in their application to a wide range of specialized phenomena.

# REQUIRED COURSE ACTIVITIES

This time period is divided into two parts, the pre-candidacy phase where the student focuses on course work and general scholarship, and the candidacy phase where the student focuses on specialized research directed to the completion of the dissertation. While flexibility is a distinct advantage of the department's small, intimate setting of graduate study compared to other, larger programs, graduate students are normally expected to progress through their study as follows. Classes are taken through the first two years of residence at the university, and a preliminary examination is taken normally in the spring of the second year. Classes are selected from the department's graduate courses, appropriate upper-level undergraduate courses and courses offered elsewhere in the university. Selection of courses is made through consultation with a faculty advisory committee, which meets regularly through the first two years of the student's residence.

The preliminary examination taken at the end of the second year of residence serves to promote students to candidacy for the Ph.D. The purpose of the examination is to ensure the student's progress in the two goals of graduate study: breadth of fundamental knowledge, and depth of knowledge in a particular area of specialization (chosen normally to be consistent with the student's anticipated dissertation topic).

The preliminary examination has two parts. The written part (taken either in one single sitting or as a series of written tests taken in conjunction with final exams of courses, depending on the particular situation) covers the aspects of knowledge addressed in courses and in the weekly seminars which students are expected to attend. The oral part requires the student to present a research prospectus to a committee of faculty advisors. The topic of this prospectus is normally expected to be the student's planned research activity directed toward the dissertation.

#### THE DISSERTATION

The Ph.D. degree is awarded to the candidate who has completed a written dissertation, defended it orally to a body of scientists which includes members of the department's faculty (who have the responsibility to vote in favor or against acceptance of the dissertation), and who have submitted the dissertation to the university dissertation office in proper form.

#### COURSES

Courses are modified from year to year. Students are expected to consult course schedules published by the University for information regarding courses offered on an infrequent basis. A student's course load is expected to be two to four classes per quarter during the first five quarters (not including Summer Quarter) of residence. Over this period, the student will take a mixture of high level (designated by numbers greater than 30000) and medium level (designated by numbers in the 20000s) classes listed under the department's offerings, and appropriate courses offered by other departments of the university.

#### GEOPHYSICAL SCIENCES COURSES

# GEOS 30200. Introduction to Research in the Geophysical Sciences. 100 Units.

This course is mandatory for all incoming graduate students in the department. Its purpose is to introduce the faculty's current research themes/areas and to familiarize incoming graduate students with research areas they might contemplate for further specialization. Lectures are presented by individual faculty on either 1) a general survey of a research area, or 2) a specialized topic of interest. Student activity varies from year to year and is based on a combination of oral and written presentations. Instructor(s): Staff Terms Offered: Autumn

# GEOS 30500. Topics in the Geophysical Sciences. 100 Units.

This course is offered from time-to-time as a means of covering topics that are generally not covered by regularly offered courses in the curriculum. Students should consult with appropriate faculty regarding opportunities to take this course when the situation arises.

Instructor(s): Staff

#### GEOS 31005. Mineral Science. 100 Units.

This course examines the relationship between the structure of minerals, their chemistry, and their physical properties. Topics include crystallography, defect properties, phase transitions, and analytical tools, followed by detailed study of specific mineral groups.

Instructor(s): A. Campbell Terms Offered: not offered 2013-2014

Prerequisite(s): GEOS 21000 or consent of instructor.

Equivalent Course(s): GEOS 21005

#### GEOS 31200. Physics of the Earth. 100 Units.

This course considers geophysical evidence bearing on the internal makeup and dynamical behavior of the Earth, including seismology (i.e., properties of elastic waves and their interpretation, and internal structure of the Earth); mechanics of rock deformation (i.e., elastic properties, creep and flow of rocks, faulting, earthquakes); gravity (i.e., geoid, isostasy); geomagnetism (i.e., magnetic properties of rocks and history, origin of the magnetic field); heat flow (i.e., temperature within the Earth, sources of heat, thermal history of the Earth); and plate tectonics and the maintenance of plate motions. (L)

Instructor(s): A. Campbell Terms Offered: Spring

Prerequisite(s): Prior calculus and college-level physics courses, or consent of instructor.

Equivalent Course(s): GEOS 21200

# GEOS 31205. Introduction to Seismology, Earthquakes, and Near-Surface Earth Seismicity. 100 Units.

This course introduces the mechanics and phenomenology of elastic waves in the Earth and in the fluids near the Earth's surface (e.g., S and P waves in the solid earth, acoustic waves in the ocean and atmosphere). Topics include stress and strain, constitutive equations, elasticity, seismic waves, acoustic waves, theory of refraction/reflection, surface waves, dispersion, and normal modes of the Earth. Phenomenology addressed includes exploration geophysics (refraction/reflection seismology), earthquakes and earthquake source characterization, seismograms as signals, seismometers and seismological networks, and digital seismogram analysis. Instructor(s): D. MacAyeal Terms Offered: Autumn

Equivalent Course(s): GEOS 21205

#### GEOS 31400. Thermodynamics and Phase Change. 100 Units.

This course develops the mathematical structure of thermodynamics with emphasis on relations between thermodynamic variables and equations of state. These concepts are then applied to homogeneous and heterogeneous phase equilibrium, culminating in the construction of representative binary and ternary phase diagrams of petrological significance.

Instructor(s): A. Campbell Terms Offered: not offered 2013-2014

Prerequisite(s): MATH 20000-20100-20200 and college-level chemistry and calculus, or consent of instructor.

Equivalent Course(s): GEOS 21400

# GEOS 31500. Mineral Physics. 100 Units.

The application of physics at the microscopic level to geologic and geophysical problems. Topics: vibrational, electric and transport properties of minerals. Instructor(s): D. Heinz

Prerequisite(s): 2 yrs. math beyond calculus; 1 year physical chemistry or 1 year of both physics and chemistry; general geology, general geophysics and mineralogy, petrology or equivalent

# GEOS 32040. Formation of Planetary Systems in Our Galaxy: From Dust to Planetesimals. 100 Units.

This course examines the physical and chemical processes that operate during the earliest stages of planet formation when dust in a protoplanetary disk aggregates into bodies 1 to 10 km in size. Topics include the physical and chemical evolution of protoplanetary disks, radial transport of dust particles, transient heating events, and the formation of planetesimals. We discuss the evidence of these processes found in meteorites and observed in disks around young stars. Chemical and physical models of dust evolution are introduced, including an overview of basic numerical modeling techniques.

Instructor(s): F. Ciesla Terms Offered: Autumn

Prerequisite(s): One year of college-level calculus and physics or chemistry, or consent of instructor.

Note(s): This course is offered in alternate years.

Equivalent Course(s): GEOS 22040

# GEOS 32050. Formation of Planetary Systems in our Galaxy: From Planetesimals to Planets. 100 Units.

This course explores the stage of planet formation during which 1 to 10 km planetesimals accrete to form planets. Topics include heating of planetesimals, models of giant planet formation, the delivery of water to terrestrial planets, and the impact that stellar mass and external environment have on planet formation. We also discuss what processes determine the properties (mass, composition, and orbital parameters) of a planet and its potential for habitability. Basic modeling techniques and current research papers in peer-reviewed journals are also discussed.

Instructor(s): F. Ciesla Terms Offered: Winter

Prerequisite(s): Consent of instructor

Note(s): This course is offered in alternate years.

Equivalent Course(s): GEOS 22050

#### GEOS 32060. What Makes a Planet Habitable? 100 Units.

This course explores the factors that determine how habitable planets form and evolve. We will discuss a range of topics, from the formation of planets around stars and the delivery of water, to the formation of atmospheres, climate dynamics, and the conditions that allow for the development of life and the evolution of complex life. Students will be responsible for reading and discussing papers in peer-reviewed journals each meeting and for periodically preparing presentations and leading the discussion.

Instructor(s): D. Abbot, F. Ciesla Terms Offered: Winter

Equivalent Course(s): ASTR 45900

# GEOS 32200. Geochronology. 100 Units.

This course covers the duration of planetary differentiation and the age of the Earth (i.e., extinct and extant chronometers); timescales for building a habitable planet (i.e., the late heavy bombardment, the origin of the atmosphere, the emergence of life, and continent extraction); dating mountains (i.e., absolute ages, exposure ages, and thermochronology); the climate record (i.e., dating layers in sediments and ice cores); and dating recent artifacts (e.g., the Shroud of Turin).

Instructor(s): N. Dauphas Terms Offered: Autumn

Prerequisite(s): Background in college-level geology, physics, and mathematics.

Equivalent Course(s): GEOS 22200

#### GEOS 32300. Cosmochemistry. 100 Units.

Chemical, mineralogical, and petrographic classifications of meteorites. Topics include: abundances of the elements, origin of the elements and stellar evolution, the interstellar medium and formation of the solar nebula, condensation of the solar system, chemical fractionations in meteorites and planets, age of the solar system, extinct radionuclides in meteorites, isotope anomalies.

Instructor(s): L. Grossman Terms Offered: Winter Note(s): This course is offered in alternate years.

# GEOS 32700. Analytical Techniques in Geochemistry. 100 Units.

Measurement of the isotopic and chemical compositions of solar system materials involves a wide variety of analytical techniques. In this course, we will review the major types of instrumentation used in modern laboratories. The goal is not to produce experts in the operation of each instrument, but rather that everyone gain an appreciation for how instruments work and what the capabilities and limitations are for each kind of instrument.

Instructor(s): A. Davis

# GEOS 32705. Analytical Techniques. 100 Units.

Theory and practice of analytical techniques.

Instructor(s): I. Steele

# GEOS 33200. Climate Dynamics of the Earth and Other Planets. 100 Units.

Prior programming experience helpful but not required. This course introduces the basic physics governing the climate of planets, the Earth in particular but with some consideration of other planets. Topics include atmospheric thermodynamics of wet and dry atmospheres, the hydrological cycle, blackbody radiation, molecular absorption in the atmosphere, the basic principles of radiation balance, and diurnal and seasonal cycles. Students solve problems of increasing complexity, moving from pencil-and-paper problems to programming exercises, to determine surface and atmospheric temperatures and how they evolve. An introduction to scientific programming is provided, but the fluid dynamics of planetary flows is not covered. (L)

Instructor(s): R. Pierrehumbert Terms Offered: Autumn

Prerequisite(s): Prior physics course (preferably PHYS 13300 and 14300) and knowledge of calculus required; prior geophysical sciences course not required.

Note(s): Prior programming experience helpful but not required.

Equivalent Course(s): GEOS 23200

# GEOS 33205. Introductory Glaciology. 100 Units.

The fundamentals of glacier and ice-sheet dynamics and phenomenology will be covered in this introductory course (snow and sea ice will be excluded from this course, however may be taken up in the future). Emphasis will be placed on developing the foundation of continuum mechanics and viscous fluid flow as a means of developing the basic equations of glacier deformation, ice-sheet and -shelf flow, basal processes, glacier hydrology, and unstable modes of flow. This course is intended for advanced undergraduate students in physics, math, geophysical sciences and related fields as well as graduate students considering research in glaciology and climate dynamics. (L)

Instructor(s): D. MacAyeal Terms Offered: Winter

Prerequisite(s): Knowledge of vector calculus, linear algebra, and computer programming.

Equivalent Course(s): GEOS 23205

# GEOS 33300. Advanced Topics in Climate Dynamics. 100 Units.

Topics will vary yearly, and will be drawn from the following, among others: real gas infrared radiative transfer; the surface energy balance of planets; radiative-convective models; data analysis of Earth and planetary climate data; 1D energy balance models; models of long term geochemical and physical evolution of atmospheres.

Instructor(s): R. Pierrehumbert Terms Offered: Winter

Prerequisite(s): GEOS 23200 or equivalent

#### GEOS 33800. Global Biogeochemical Cycles. 100 Units.

This survey course covers the geochemistry of the surface of the Earth, with emphasis on biological and geological processes, their assembly into self-regulating systems, and their potential sensitivity to anthropogenic or other perturbations. Budgets and cycles of carbon, nitrogen, oxygen, phosphorous, sulfur, and silicon are discussed, as well as fundamentals of the processes of weathering, sediment diagenesis, and isotopic fractionation. What is known about the biogeochemistry of the Earth through geologic time is also presented.

Instructor(s): D. Archer Terms Offered: not offered 2013-2014 Prerequisite(s): CHEM 11100-11200 or consent of instructor

Equivalent Course(s): GEOS 23800

# GEOS 33805. Stable Isotope Biogeochemistry. 100 Units.

Stable isotopes of H, C, O, N, and S are valuable tools for understanding the biological and geochemical processes that have shaped the composition of Earth's atmosphere and oceans throughout our planet's history. This course examines basic thermodynamic and kinetic theory to describe the behavior of isotopes in chemical and biological systems. We then examine the stable isotope systematics of localized environmental processes, and see how local processes contribute to global isotopic signals that are preserved in ice, sediment, rock, and fossils. Special emphasis is placed on the global carbon cycle, the history of atmospheric oxygen levels, and paleoclimate.

Instructor(s): A. Colman Terms Offered: Winter

Prerequisite(s): CHEM 11100-11200-11300 or equivalent; 13100-13200-13300 or

consent of instructor

Equivalent Course(s): GEOS 23805

#### GEOS 33900. Environmental Chemistry. 100 Units.

The focus of this course is the fundamental science underlying issues of local and regional scale pollution. In particular, the lifetimes of important pollutants in the air, water, and soils are examined by considering the roles played by photochemistry, surface chemistry, biological processes, and dispersal into the surrounding environment. Specific topics include urban air quality, water quality, long-lived organic toxins, heavy metals, and indoor air pollution. Control measures are also considered. (L)

Instructor(s): A. Colman, D. Archer Terms Offered: Autumn

Prerequisite(s): CHEM 11101-11201 or equivalent, and prior calculus course

Equivalent Course(s): GEOS 23900, ENST 23900

#### GEOS 34100. Fundamentals of Fluid Mechanics. 100 Units.

This course provides an introduction to concepts and phenomenology of fluid mechanics of newtonian fluids. Classroom demonstrations are coupled with analytical treatment of equations of motion and their approximations. Topics include (1) pressure and stress, (2) Bernoulli s theorem, (3) vorticity and turbulence, (4) surface and internal waves, (5) effects of rotation and gravity on stability, (6) spin up. The lectures are supplemented by problem sets. Commands of vector calculus are highly desirable.

Instructor(s): N. Nakamura

Prerequisite(s): Classical mechanics and vector calculus

# GEOS 34105. Dynamics of Viscous Fluids. 100 Units.

This course is offered on an occasional basis, and deals with the thermomechanical properties and behavior of ideal viscous fluids, with applications in special areas of geophysical fluid dynamics, particularly glaciology and mantle isostacy. Topics to be covered include: constitutive descriptions of ideal and non ideal fluids, compressible and incompressible fluids, coulomb failure laws, plastic approximations, kinematics of flow fields, strain and strain rate tensors, equations governing the balance of momentum and energy, stress tensor, Navier Stokes equations, Stokesian flows, non Newtonian constitutive laws and laminar/turbulent transitions. Special cases of fluid flow will be examined, including irrotational and incompressible flow, Bernoulli's theorem for inviscid fluids, jets, wakes and flow past rigid boundaries. Special boundary conditions will be examined, including both dynamic and kinematic. Geophysical applications in 2005 ranged across the basics of glaciological flow systems, including classical Nye/Vialov icesheet flow, ice shelf flow and basal sliding. Readings will include chapters from G.K. Batchelor s An Introduction to Fluid Dynamics and occasional classical journal articles in glaciology.

Instructor(s): D. MacAyeal

# GEOS 34200. Geophysical Fluid Dynamics. 100 Units.

Theoretical foundation for understanding the large scale flow patterns in the Earth's atmosphere and ocean. Topics include: The governing equations for fluids on a rotating sphere under gravity; basic conservation properties; linear wave dynamics and geostrophic adjustment; quasigeostrophic dynamics with Ekman friction; effects of isolated mountains on the general circulation of the atmosphere; two layer model of baroclinic instability and implications to storm organization; wind driven ocean circulation.

Instructor(s): N. Nakamura

Prerequisite(s): One quarter of fluid mechanics in any discipline or consent of instructor.

# GEOS 34400. Topics in Geophysical Fluid Dynamics. 100 Units.

This course teaches science and art of numerical modeling at an elementary level. Classroom discussions on mathematical principles will be supplemented by a series of actual coding assignments. (Command of a programming language is assumed; this is not a course on programming.) It is our goal that at the end of the course each student will have coded a working copy of shallow water model on a rotating sphere (and do science with it). Prereq: Calculus, working knowledge of Fourier Transform and of a programming language (C, Fortran, IDL, etc.), access to a computer with a compiler and runtime environment. No previous experience in fluid dynamics is necessary, although this course alone does not fully prepare one to become a fluid dynamicist.

Instructor(s): N. Nakamura

# GEOS 34500. The Atmosphere and Ocean in Motion. 100 Units.

The motion of the atmosphere and ocean not only affects daily weather conditions but is also critical in maintaining the habitable climate of our planet. This course teaches: (1) observed patterns of large-scale circulation of the atmosphere and ocean; (2) physical principles that drive the observed circulation; (3) transport of heat, angular momentum, and other quantities; and (4) climate variability and predictability. The lectures are supplemented by problem sets and a computer lab project.

Instructor(s): N. Nakamura Terms Offered: Spring Prerequisite(s): GEOS 13300 or equivalent, and calculus

Equivalent Course(s): GEOS 24500

#### GEOS 34505. Dynamics of the Stratosphere. 100 Units.

Focus on the vertical structure of the Earth's atmosphere due to compressibility and radiative heating, and its consequences on the dynamics, particularly of the stratosphere. Emphasis is placed more on the underlying physics than on the mere phenomenology of the stratosphere.

Instructor(s): N. Nakamura

Prerequisite(s): GEOS 34200 or equivalent

# GEOS 34510. Topics in Atmospheric Science. 100 Units.

Topics of current interest in atmospheric science, with a particular emphasis on issues arising in recent publications. Topics covered have included: tropical circulations, cloud climate feedbacks, and dynamics of the stratosphere.

Instructor(s): Staff

Prerequisite(s): consent of instructor

#### GEOS 34600. Laboratory Course on Weather and Climate. 100 Units.

Working in groups, students gain hands-on experience in designing, implementing, and analyzing experiments concerning the principles of rotating fluids that underlie weather and climate.

Instructor(s): N. Nakamura Terms Offered: Spring

Equivalent Course(s): GEOS 24600

# GEOS 34705. Energy: Science, Technology, and Human Usage. 100 Units.

This course covers the technologies by which humans appropriate energy for industrial and societal use, from steam turbines to internal combustion engines to photovoltaics. We also discuss the physics and economics of the resulting human energy system: fuel sources and relationship to energy flows in the Earth system; and modeling and simulation of energy production and use. Our goal is to provide a technical foundation for students interested in careers in the energy industry or in energy policy. Field trips required to major energy converters (e.g., coal-fired and nuclear power plants, oil refinery, biogas digester) and users (e.g., steel, fertilizer production).

Instructor(s): E. Moyer Terms Offered: Spring

Prerequisite(s): Knowledge of physics or consent of instructor

Equivalent Course(s): GEOS 24705, ENST 24705

#### GEOS 34800. Radiation Transfer Theory. 100 Units.

Develops the theory of radiation emission, absorption, and scattering by planetary atmospheres. Emphasis on the derivation and solution of the radiative transfer equation for plane parallel, horizontally homogeneous atmospheres.

Instructor(s): J. Frederick, R. Pierrehumbert

Prerequisite(s): Advanced undergraduate level knowledge of electromagnetic theory, atomic structure, and differential equations.

# GEOS 35400. Introduction to Numerical Techniques for the Geophysical Sciences. 100 Units.

This class provides an introduction to different types of numerical techniques used in developing models used in geophysical science research. Topics will include how to interpolate and extrapolate functions, develop functional fits to data, integrate a function, or solve partial differential equations. Students are expected to have some familiarity with computers and programming—programming methods will not be discussed in detail. While techniques will be the focus of the class, we will also discuss the planning needed in developing a model as well as the limitations inherent in such models.

Instructor(s): F. Ciesla Terms Offered: Autumn

Prerequisite(s): Familiarity with a computer programming language such as C, Fortran, or IDL, or a mathematical computing environment like Mathematica or Matlab. Spreadsheets such as Excel or Numbers can also be used for many problems.

Equivalent Course(s): GEOS 25400

#### GEOS 35500. Mathematical Methods for the Earth Sciences. 100 Units.

This course is intended to be a brief introduction to mathematical methods that may be of use in the Earth Sciences. The focus will be on building physical intuition and practical problem solving. Students may solve problems analytically, or write numerical codes to solve them.

Instructor(s): D. Abbot Terms Offered: Spring

# GEOS 36000. Morphometrics. 100 Units.

This graduate-level course serves as an introduction to the field of morphometrics (the analysis of organismal shape). Quantitative exploratory and confirmatory techniques involving both traditional (length-based) and geometric (landmark-based) summaries of organismal shape are introduced in a series of lectures and practical exercises. Emphasis is placed on the application of morphometric methods to issues such as (but not restricted to) quantification of intraspecific variability, interspecific differences, disparity, ontogenetic growth patterns (allometry), and phylogenetic changes in morphology. Relevant statistical and algebraic operations are explained assuming no prior background. Students are required to bring personal laptop computers, and are expected to acquire and analyze their own data sets during the course.

Instructor(s): M. Webster

Equivalent Course(s): EVOL 36700

#### GEOS 36200. Evolution and the Fossil Record. 100 Units.

This course serves as an introduction to the practical and theoretical issues involved in obtaining primary systematic data from the fossil record, and demonstrates the criticality of such data to the rigorous documentation and interpretation of evolutionary patterns. Precise topics of the seminar discussions will vary from year to year depending on relevance to student research projects and interest, but are likely to focus on issues such as (but not restricted to) practical techniques in specimen-based paleontology (including fossil preparation and photography), species delimitation (including species concepts, variability, and ecophenotypy), stratigraphic/geographic range determination (including biostratigraphic correlation), phylogeny reconstruction (including the relevance of stratigraphic data), and the importance of these topics to broader macroevolutionary issues such as diversity/disparity dynamics and the determination of evolutionary trends, rates and processes.

Instructor(s): M. Webster

Equivalent Course(s): EVOL 46200

# GEOS 36300. Invertebrate Paleobiology and Evolution. 100 Units.

This course provides a detailed overview of the morphology, paleobiology, evolutionary history, and practical uses of the invertebrate and microfossil groups commonly found in the fossil record. Emphasis is placed on understanding key anatomical and ecological innovations within each group and interactions among groups responsible for producing the observed changes in diversity, dominance, and ecological community structure through evolutionary time. Labs supplement lecture material with specimen-based and practical application sections. An optional field trip offers experience in the collection of specimens and raw paleontological data. Several "Hot Topics" lectures introduce important, exciting, and often controversial aspects of current paleontological research linked to particular invertebrate groups. Instructor(s): M. Webster L. Terms Offered: Autumn

Prerequisite(s): GEOS 13100 and 13200, or equivalent. Students majoring in biological sciences only; Completion of the general education requirement in the biological sciences, or consent of instructor.

Equivalent Course(s): GEOS 26300, BIOS 23261, EVOL 32400

# GEOS 36400. Principles of Paleontology. 100 Units.

The focus of this course is on the nature of the fossil record, the information it provides on patterns and processes of evolution through geologic time, and how it can be used to solve geological and biological problems. Lectures cover the principles of paleontology (e.g., fossilization, classification, morphologic analysis and interpretation, biostratigraphy, paleoecology, macroevolution); labs are systematic, introducing major groups of fossil invertebrates. (L) Instructor(s): M. Foote Terms Offered: not offered 2013-2014

Prerequisite(s): GEOS 13100-13200, or completion of the general education requirement in the biological sciences, or consent of instructor.

Equivalent Course(s): GEOS 26400, BIOS 23255, EVOL 32300

# GEOS 36501. Paleobiological Modeling and Analysis-1. 100 Units.

This course is an introduction to mathematical modeling as applied to problems in paleobiology and evolutionary biology. Topics include: basic probability theory; general approaches to modeling; model comparison using likelihood and other criteria; forward modeling of branching processes; sampling models; and inverse methods. A series of programming exercises and a term project are required. Programming in R or C is recommended, but any language may be used. Winter quarter, generally in even numbered years. GEOS 36501 and GEOS 36502 can be taken in either order.

Instructor(s): M. Foote Terms Offered: Winter

Prerequisite(s): Mathematics through first-year calculus; basic computer programming skills (or willingness to learn); elementary statistics helpful. Equivalent Course(s): EVOL 33001

#### GEOS 36502. Paleobiological Modeling and Analysis-2. 100 Units.

This course is an introduction to multivariate analysis, with emphasis on morphological data and problems in paleontology and evolutionary biology. Topics include: types of data and scales of measurement; data transformations; bivariate analysis; measurement of similarity and difference; clustering; ordination; singular value decomposition; principal component analysis, factor analysis, principal coordinates, correspondence analysis, and other eigenvector methods; and path analysis. Each student will bring a multivariate dataset (not necessarily original) to the course and will write a series of short papers based on analysis of these data. Code written in the R programming language will be supplied for most analyses. Winter quarter, generally in odd numbered years. GEOS 36501 and GEOS 36502 can be taken in either order.

Instructor(s): M. Foote Terms Offered: Winter

Prerequisite(s): Mathematics at secondary school level; basic computer programming skills (or willingness to learn); calculus, linear algebra, and elementary statistics also helpful, although essential points will be reviewed. Equivalent Course(s): EVOL 33002

#### GEOS 36600. Geobiology. 100 Units.

,Geobiology seeks to elucidate the interactions between life and its environments that have shaped the coevolution of the Earth and the biosphere. The course will explore the ways in which biological processes affect the environment and how the evolutionary trajectories of organisms have in turn been influenced by environmental change. In order to reconstruct the history of these processes, we will examine the imprints they leave on both the rock record and on the genomic makeup of living organisms. The metabolism and evolution of microorganisms, and the biogeochemistry they drive, will be a major emphasis.,

Instructor(s): M. Coleman, J. Waldbauer Terms Offered: Spring

Prerequisite(s): GEOS 13100-13200-13300 or college-level cell & molecular biology

Equivalent Course(s): GEOS 26600

# GEOS 36700. Taphonomy. 100 Units.

Lecture and research course on patterns and processes of fossilization, including rates and controls of soft tissue decomposition, post mortem behavior of skeletal hard parts, concentration and burial of remains, scales of time averaging, and the net spatial and compositional fidelity of (paleo)biologic information, including trends across environments and evolutionary time. Offered alternate years.

Instructor(s): S. Kidwell

Equivalent Course(s): EVOL 31800

#### GEOS 36800. Macroevolution. 100 Units.

Patterns and processes of evolution above the species level, in both recent and fossil organism. A survey of the current literature, along with case studies.

Instructor(s): D. Jablonski Terms Offered: Spring

Equivalent Course(s): EVOL 31700

# GEOS 36900. Topics in Paleobiology. 100 Units.

In this seminar we investigate paleobiological or multidisciplinary topics of current interest to students and faculty. Previous subjects include the origin of phyla, historical and macro-ecology, the stratigraphic record and evolutionary patterns, and climate and evolution.

Instructor(s): D. Jablonski, S. Kidwell, T. Price Terms Offered: Autumn Equivalent Course(s): EVOL 31900, ECEV 36900

# GEOS 36905. Topics in Conservation Paleobiology. 100 Units.

Instructor(s): S. Kidwell

#### GEOS 37000. Evolutionary History of Terrestrial Ecosystems. 100 Units.

This seminar course covers the evolution of terrestrial ecosystems from their Paleozoic assembly through to the modern world. The fossil history of plant, vertebrate, invertebrate, and fungal lineages are covered, as well as the diversification of their ecological interactions. The influence of extinction events and important extrinsic factors (e.g., geography, climate, atmospheric composition) also are considered.

Instructor(s): C. K. Boyce Terms Offered: Spring Equivalent Course(s): EVOL 32500,GEOS 27000

#### GEOS 37100. Plant Paleontology. 100 Units.

Introduction to all major groups of extant and fossil plants, ranging from green algae to angiosperms. Discussions of plant taphonomy, the use of fossil plants as indicators of paleoclimate, the fossil spore/pollen record, evolutionary and paleoclimatic applications of palynological data, and the history of terrestrial ecosystems. Examination of living and fossil material at the Garfield Park Conservatory and the Field Museum.

Instructor(s): C. Boyce

#### GEOS 38000. Introduction to Structural Geology. 100 Units.

This course explores the deformation of the Earth materials primarily as observed in the crust. We emphasize stress and strain and their relationship to incremental and finite deformation in crustal rocks, as well as techniques for inferring paleostress and strain in deformed crustal rocks. We also look at mesoscale to macroscale structures and basic techniques of field geology in deformed regions.

Instructor(s): D. Rowley Terms Offered: Winter

Prerequisite(s): GEOS 13100

Note(s): This course is offered in alternate years.

Equivalent Course(s): GEOS 28000

#### GEOS 38100. Global Tectonics. 100 Units.

This course reviews the spatial and temporal development of tectonic and plate tectonic activity of the globe. We focus on the style of activity at compressive, extensional, and shear margins, as well as on the types of basin evolution associated with each. (L)

Instructor(s): D. Rowley Terms Offered: Winter Prerequisite(s): GEOS 13100 or consent of instructor Note(s): This course is offered in alternate years.

Equivalent Course(s): GEOS 28100

# GEOS 38300. Principles of Stratigraphy. 100 Units.

This course introduces principles and methods of stratigraphy. Topics include facies analysis, physical and biostratigraphic correlation, and development and calibration of the geologic time scale. We also discuss controversies concerning the completeness of the stratigraphic record; origin of sedimentary cycles; and interactions between global sea level, tectonics, and sediment supply. (L)

Instructor(s): S. Kidwell Terms Offered: Autumn

Prerequisite(s): GEOS 13100-13200 or equivalent required; GEOS 23500 and/or 28200 recommended

Note(s): This course is offered in alternate years.

Equivalent Course(s): GEOS 28300

#### GEOS 38400. Topics in Stratigraphy and Biosedimentology. 100 Units.

Seminar course using the primary literature and/or a field problem. Topic selected from the rapidly evolving fields of sequence stratigraphy, basin analysis, and animal sediment relationships.

Instructor(s): S. Kidwell

Prerequisite(s): GEOS 26400 and GEOS 28300 or equivalent

Equivalent Course(s): EVOL 41500

#### GEOS 38500. Stratigraphic Analysis. 100 Units.

Historical review of basic concepts and methods, leading to current frontiers and controversies in basin and global scale analysis of the sedimentary rock record.

Instructor(s): S. Kidwell

Prerequisite(s): GEOS 28300 or equivalent

#### GEOS 39002. Field Course in Modern and Ancient Environments. 100 Units.

This course uses weekly seminars during Winter Quarter to prepare for a one-week field trip over spring break, where students acquire experience with sedimentary rocks and the modern processes responsible for them. Destinations vary; past trips have examined tropical carbonate systems of Jamaica and the Bahamas and subtropical coastal Gulf of California. We usually consider biological, as well as physical, processes of sediment production, dispersal, accumulation, and post-depositional modification.

Instructor(s): S. Kidwell, M. LaBarbera Terms Offered: Winter

Note(s): Organizational meeting and deposit usually required in Autumn Quarter; interested students should contact an instructor in advance.

Equivalent Course(s): GEOS 29002

# GEOS 39700. Reading and Research in the Geophysical Sciences. Variable Units.

GEOS 39700-39799. Topics available include, but are not limited to: Mineralogy, Petrology, Geophysics, High Pressure Geophysics, Geodynamics, Volcanology, Cosmochemistry, Geochemistry, Atmospheric Dynamics, Paleoclimatology, Physical Oceanography, Chemical Oceanography, Paleoceanography, Atmospheric Chemistry, Fluid Dynamics, Glaciology, Climatology, Radiative Transfer, Cloud Physics, Morphometrics, Phylogeny, Analytical Paleontology, Evolution, Taphonomy, Macroevolution, Paleobiology, Aktuopaleontology, Paleobotany, Biomechanics, Paleoecology, Tectonics, Stratigraphy.

Instructor(s): Staff Terms Offered: Autumn, Winter, Spring, Summer Prerequisite(s): Admission to graduate status

# GEOS 39800. Reading and Research in the Geophysical Sciences for the Master's Degree. Variable Units.

An essay or formal thesis will be required.

Instructor(s): Staff Terms Offered: Autumn, Winter, Spring, Summer

Prerequisite(s): admission to grad status

# GEOS 49700. Advanced Reading and Research in the Geophysical Sciences. Variable Units.

GEOS 49700-49799. Topics available include, but are not limited to: Mineralogy, Petrology, Geophysics, High Pressure Geophysics, Geodynamics, Volcanology, Cosmochemistry, Geochemistry, Atmospheric Dynamics, Paleoclimatology, Physical Oceanography, Chemical Oceanography, Paleoceanography, Atmospheric Chemistry, Fluid Dynamics, Glaciology, Climatology, Radiative Transfer, Cloud Physics, Morphometrics, Phylogeny, Analytical Paleontology, Evolution, Taphonomy, Macroevolution, Paleobiology, Aktuopaleontology, Paleobotany, Biomechanics, Paleoecology, Tectonics, Stratigraphy.

Instructor(s): Staff Terms Offered: Autumn, Winter, Spring, Summer Prerequisite(s): admission to Ph.D. candidacy

# GEOS 49900. Post Ph.D. Research. Variable Units.

Instructor(s): Staff Terms Offered: Autumn, Winter, Spring, Summer



# DEPARTMENT OF MATHEMATICS

#### Chair

- Shmuel Weinberger
  - **Professors**
- Jonathan L. Alperin
- Laszlo Babai, Computer Science
- Alexander A. Beilinson
- Danny Calegari
- · Kevin D. Corlette
- · Jack D. Cowan
- Marianna Csörnyei
- · Vladimir Drinfeld
- Todd Dupont, Computer Science
- Matthew Emerton
- Alex Eskin
- Benson Farb
- Robert A. Fefferman
- Victor Ginzburg
- · Denis Hirschfeldt
- Kazuya Kato
- · Carlos E. Kenig
- Steven Lalley, Statistics
- · Gregory Lawler
- · J. Peter May
- · Bao Chau Ngo
- Madhav Vithal Nori
- · Niels O. Nygaard
- Paul J. Sally
- Wilhelm Schlag
- L. Ridgway Scott, Computer Science
- Robert I. Soare, Computer Science
- Panagiotis Souganidis
- · Sidney Webster
- Shmuel Weinberger
- Amie Wilkinson
- Robert Zimmer
  - Associate Professors
- · Roger Lee

#### **Assistant Professors**

- Jian Ding
- Luis Silvestre
- Jonathan Weare

#### Instructors

- Antonio Auffinger
- David Aulicino
- · Jonathan Barley
- Ana Caraiani
- · Jonathan Chaika
- Wei-Kuo Chen
- Adina Ciomaga
- · Sebastian Hensel
- Eddie Herman
- Min Huang
- Tianling Jin
- · Michael Khanevsky
- Rostyslan Kravchenko
- Baoping Liu
- Maryanthe Malliaris
- Chen Meiri
- Matthew Morrow
- · Antonio Munoz
- Angelica Osorno
- Davide Reduzzi
- Anne Shiu
- Hung Tran
- Alden Walker
- Liang Xiao
- Ke Ye
- Qian Yin
- Inna Zakharevich
  - **Emeritus Faculty**
- Walter L. BailySpencer Bloch
- Spericer Bloch
- George Glauberman
- Leo P. Kadanoff, Physics
- Robert Kottwitz
- Norman Lebovitz

- Arunas L. Liulevicius
- Matam P. Murthy
- Raghavan Narasimhan
- Melvin G. Rothenberg

The Department of Mathematics (http://www.math.uchicago.edu) provides a comprehensive education in mathematics which takes place in a stimulating environment of intensive research activity. The graduate program includes both pure and applied areas of mathematics. Ten to fifteen graduate courses are offered every quarter. Several seminars take place every afternoon. There is an active visitors program with mathematicians from around the world coming for periods from a few days to a few months. There are four major lecture series each year: the Adrian Albert Lectures in Algebra, the Antoni Zygmund and Alberto Calderón Lectures in Analysis, the Unni Namboodiri Lectures in Topology, and the Charles Amick Lectures in Applied Mathematics. The activities of the department take place in Eckhart and Ryerson Halls. These contiguous buildings are shared with the Departments of Statistics and Computer Science. The Department of Mathematics and the Department of Computer Science have several joint appointments, and they coordinate their activities. The Department of Mathematics also has joint appointments and joint activity with the Department of Physics.

# GRADUATE DEGREES IN MATHEMATICS

The graduate program of the Department of Mathematics is oriented towards students who intend to earn a Ph.D. in mathematics on the basis of work done in either pure or applied mathematics. The department also offers the degree of Master of Science in mathematics, which is acquired as the student proceeds on to the Ph.D. degree. Students are not admitted with the Master of Science degree as their final objective. In addition, the department offers a separate Master of Science in Financial Mathematics degree program which is taught in the evenings. See the program listing for Financial Mathematics (https://upcomingcatalog.uchicago.edu/graduate/departmentofmathematics/financialmathematics) for more information.

The divisional requirements for these degrees can be found in the section on the Division of the Physical Sciences in these *Announcements*. The departmental requirements for students choosing the program in applied mathematics are described below under the heading, Graduate Degrees in Applied Mathematics. Otherwise, the requirements are as follows.

# THE DEGREE OF MASTER OF SCIENCE

The candidate must pass, to the instructor's satisfaction, the nine basic first year graduate courses in the areas of

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MATH 32500	Algebra I	100
MATH 32600	Algebra II	100
MATH 32700	Algebra III	100
Analysis		

MATH 31200	Analysis I	100
MATH 31300	Analysis II	100
MATH 31400	Analysis III	100
Topology		
MATH 31700	Topology and Geometry I	100
MATH 31800	Topology and Geometry II	100
MATH 31900	Topology and Geometry III	100

With the approval of the department, the exceptionally well prepared student may place out of one or more of these courses, and substitute a more advanced course.

If any of these courses are not passed to the instructor's satisfaction, the student will be required to take an oral exam in those subject areas before receiving the Master of Science degree.

The student must also pass a reading exam (in a form approved by the department) in French, German or Russian.

# THE DEGREE OF DOCTOR OF PHILOSOPHY

For admission to candidacy for the Doctor of Philosophy, an applicant must demonstrate the ability to meet both the divisional requirements and the departmental requirements for admission.

The applicant must satisfy the above mentioned requirements for the degree of Master of Science in mathematics.

The applicant must satisfactorily complete an oral topic presentation. This presentation covers material that is chosen by the student in consultation with members of the department and is studied independently. The topic presentation is normally made by the end of the student's second year of graduate study.

The applicant must also successfully complete the department's program of preparatory training in the effective teaching of mathematics in the English language at a level commensurate with the level of instruction at the University of Chicago.

After successful completion of the topic presentations, the student is expected to begin research towards the dissertation under the guidance of a member of the department. The remaining requirements are to:

- Complete a dissertation containing original, substantial, and publishable mathematical results
- 2. Present the contents of the dissertation in an open lecture
- Pass an oral examination based both on the dissertation and the field of mathematics in which it lies

# GRADUATE DEGREES IN APPLIED MATHEMATICS

The Department of Mathematics, through the Computational and Applied Mathematics Program (CAMP), offers interdisciplinary programs in applied mathematics leading to S.M. and Ph.D. degrees. These programs overlap with but are different from the program in pure mathematics and allow for variations

depending on the direction of applications the student chooses. Students choosing the applied mathematics program will participate in courses and seminars not only with pure mathematics students, but also with students in the sciences who have chosen an applied mathematics emphasis in their own departments.

Expanded activity in applied mathematics is occurring within the Department of Mathematics and in the Division of the Physical Sciences. Moreover, the department recognizes that students enter applied mathematics from diverse backgrounds, and that some otherwise well qualified students may require more than one year to satisfy the requirements described below.

To obtain the degree of Master of Science in mathematics under the auspices of CAMP, the candidate must meet the departmental requirements stated above, with the modification that the nine graduate courses to be passed are not restricted to those listed above. These nine courses must, however, include the analysis sequence:

MATH Analysis I-II-III 300 31200-31300-31400

They must also include a second, approved three quarter sequence of mathematics courses. This will normally be a sequence of applied mathematics courses emphasizing differential equations, ordinary and partial, and their numerical treatment. They may, however, consist of the algebra or topology sequence.

A third approved sequence of courses may be chosen from the offerings of the Department of Mathematics or from those of another department. Possible choices of sequences outside the Department of Mathematics are:

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Astronomy	Œ	Astrob	nvsics

J	1 /	
ASTR 30100	Stars	100
ASTR 30300	Intersellar Matter	100
Chemistry		
CHEM 36100	Wave Mechanics and Spectroscopy	100
CHEM 36200	Quantum Mechanics	100
CHEM 36300	Statistical Thermodynamics	100
Economics		
ECON 30600	THE ECONOMICS OF INFORMATION	100
Geophysical Scien	ces	
Physics		
PHYS 32200	Advanced Electrodynamics I	100
PHYS 32300	Advanced Electrodynamics II	100
and a third course	to be approved	

The requirements for the Ph.D. in applied mathematics are the same as the departmental requirements listed above.

#### MATHEMATICS COURSES

# MATH 30200-30300. Computability Theory I-II.

The courses in this sequence are offered in alternate years.

# MATH 30200. Computability Theory I. 100 Units.

CMSC 38000 is concerned with recursive (computable) functions and sets generated by an algorithm (recursively enumerable sets). Topics include various mathematical models for computations (e.g., Turing machines and Kleene schemata, enumeration and s-m-n theorems, the recursion theorem, classification of unsolvable problems, priority methods for the construction of recursively enumerable sets and degrees).

Instructor(s): R. Soare Terms Offered: Winter

Prerequisite(s): Consent of department counselor. MATH 25500 or consent of instructor.

Equivalent Course(s): CMSC 38000

# MATH 30300. Computability Theory II. 100 Units.

CMSC 38100 treats classification of sets by the degree of information they encode, algebraic structure and degrees of recursively enumerable sets, advanced priority methods, and generalized recursion theory.

Instructor(s): R. Soare Terms Offered: Winter, Spring

Prerequisite(s): Consent of department counselor. MATH 25500 or consent of instructor.

Equivalent Course(s): CMSC 38100

# MATH 30300. Computability Theory II. 100 Units.

CMSC 38100 treats classification of sets by the degree of information they encode, algebraic structure and degrees of recursively enumerable sets, advanced priority methods, and generalized recursion theory.

Instructor(s): R. Soare Terms Offered: Winter, Spring

Prerequisite(s): Consent of department counselor. MATH 25500 or consent of instructor.

Equivalent Course(s): CMSC 38100

# MATH 30500. Computability and Complexity Theory. 100 Units.

Part one of this course consists of models for defining computable functions: primitive recursive functions, (general) recursive functions, and Turing machines; the Church-Turing Thesis; unsolvable problems; diagonalization; and properties of computably enumerable sets. Part two of this course deals with Kolmogorov (resource bounded) complexity: the quantity of information in individual objects. Part three of this course covers functions computable with time and space bounds of the Turing machine: polynomial time computability, the classes P and NP, NP-complete problems, polynomial time hierarchy, and P-space complete problems.

Instructor(s): A. Razborov Terms Offered: Winter

Prerequisite(s): Consent of department counselor and instructor

Equivalent Course(s): CMSC 38500

# MATH 30900-31000. Model Theory I-II.

MATH 30900 covers completeness and compactness; elimination of quantifiers; omission of types; elementary chains and homogeneous models; two cardinal theorems by Vaught, Chang, and Keisler; categories and functors; inverse systems of compact Hausdorf spaces; and applications of model theory to algebra. In MATH 31000, we study saturated models; categoricity in power; the Cantor-Bendixson and Morley derivatives; the Morley theorem and the Baldwin-Lachlan theorem on categoricity; rank in model theory; uniqueness of prime models and existence of saturated models; indiscernibles; ultraproducts; and differential fields of characteristic zero.

#### MATH 30900. Model Theory I. 100 Units.

MATH 30900 covers completeness and compactness; elimination of quantifiers; omission of types; elementary chains and homogeneous models; two cardinal theorems by Vaught, Chang, and Keisler; categories and functors; inverse systems of compact Hausdorf spaces; and applications of model theory to algebra.

Prerequisite(s): MATH 25500 or 25800

Note(s): This course is offered in alternate years.

# MATH 31000. Model Theory II. 100 Units.

MATH 31000 covers saturated models; categoricity in power; the Cantor-Bendixson and Morley derivatives; the Morley theorem and the Baldwin-Lachlan theorem on categoricity; rank in model theory; uniqueness of prime models and existence of saturated models; indiscernibles; ultraproducts; and differential fields of characteristic zero.

Terms Offered: Spring

Prerequisite(s): MATH 30900

Note(s): This course is offered in alternate years.

# MATH 31000. Model Theory II. 100 Units.

MATH 31000 covers saturated models; categoricity in power; the Cantor-Bendixson and Morley derivatives; the Morley theorem and the Baldwin-Lachlan theorem on categoricity; rank in model theory; uniqueness of prime models and existence of saturated models; indiscernibles; ultraproducts; and differential fields of characteristic zero.

Terms Offered: Spring

Prerequisite(s): MATH 30900

Note(s): This course is offered in alternate years.

#### MATH 31200-31300-31400. Analysis I-II-III.

Analysis I-II-III

#### MATH 31200. Analysis I. 100 Units.

Topics include: Measure theory and Lebesgue integration, harmonic functions on the disk and the upper half plane, Hardy spaces, conjugate harmonic functions, Introduction to probability theory, sums of independent variables, weak and strong law of large numbers, central limit theorem, Brownian motion, relation with harmonic functions, conditional expectation, martingales, ergodic theorem, and other aspects of measure theory in dynamics systems, geometric measure theory, Hausdorff measure.

Terms Offered: Autumn

Prerequisite(s): MATH 26200, 27000, 27200, and 27400; and consent of director

or co-director of undergraduate studies

# MATH 31300. Analysis II. 100 Units.

Topics include: Hilbert spaces, projections, bounded and compact operators, spectral theorem for compact selfadjoint operators, unbounded selfadjoint operators, Cayley transform, Banach spaces, Schauder bases, Hahn-Banach theorem and its geometric meaning, uniform boundedness principle, open mapping theorem, Frechet spaces, applications to elliptic partial differential equations, Fredholm alternative.

Terms Offered: Winter

Prerequisite(s): MATH 31200

# MATH 31400. Analysis III. 100 Units.

Topics include: Basic complex analysis, Cauchy theorem in the homological formulation, residues, meromorphic functions, Mittag-Leffler theorem, Gamma and Zeta functions, analytic continuation, mondromy theorem, the concept of a Riemann surface, meromorphic differentials, divisors, Riemann-Roch theorem, compact Riemann surfaces, uniformization theorem, Green functions, hyperbolic surfaces, covering spaces, quotients.

Terms Offered: Spring

Prerequisite(s): MATH 31300

## MATH 31300. Analysis II. 100 Units.

Topics include: Hilbert spaces, projections, bounded and compact operators, spectral theorem for compact selfadjoint operators, unbounded selfadjoint operators, Cayley transform, Banach spaces, Schauder bases, Hahn-Banach theorem and its geometric meaning, uniform boundedness principle, open mapping theorem, Frechet spaces, applications to elliptic partial differential equations, Fredholm alternative.

Terms Offered: Winter

Prerequisite(s): MATH 31200

#### MATH 31400. Analysis III. 100 Units.

Topics include: Basic complex analysis, Cauchy theorem in the homological formulation, residues, meromorphic functions, Mittag-Leffler theorem, Gamma and Zeta functions, analytic continuation, mondromy theorem, the concept of a Riemann surface, meromorphic differentials, divisors, Riemann-Roch theorem, compact Riemann surfaces, uniformization theorem, Green functions, hyperbolic surfaces, covering spaces, quotients.

Terms Offered: Spring

Prerequisite(s): MATH 31300

# MATH 31700-31800-31900. Topology and Geometry I-II-III.

Topology and Geometry I-II-III

# MATH 31700. Topology and Geometry I. 100 Units.

Topics include: Fundamental group, covering space theory and Van Kampen's theorem (with a discussion of free and amalgamated products of groups), homology theory (singular, simplicial, cellular), cohomology theory, Mayer-Vietoris, cup products, Poincare Duality, Lefschetz fixed-point theorem, some homological algebra (including the Kunneth and universal coefficient theorems), higher homotopy groups, Whitehead's theorem, exact sequence of a fibration, obstruction theory, Hurewicz isomorphism theorem.

Terms Offered: Autumn

Prerequisite(s): MATH 26200, 27000, 27200, and 27400; and consent of director or co-director of undergraduate studies

#### MATH 31800. Topology and Geometry II. 100 Units.

Topics include: Definition of manifolds, tangent and cotangent bundles, vector bundles. Inverse and implicit function theorems. Sard's theorem and the Whitney embedding theorem. Degree of maps. Vector fields and flows, transversality, and intersection theory. Frobenius' theorem, differential forms and the associated formalism of pullback, wedge product, integration, etc. Cohomology via differential forms, and the de Rham theorem. Further topics may include: compact Lie groups and their representations, Morse theory, cobordism, and differentiable structures on the sphere.

Terms Offered: Winter Prerequisite(s): MATH 31700

### MATH 31900. Topology and Geometry III. 100 Units.

Topics include: Riemannian metrics, connections and curvature on vector bundles, the Levi-Civita connection, and the multiple interpretations of curvature. Geodesics and the associated variational formalism (formulas for the 1st and 2nd variation of length), the exponential map, completeness, and the influence of curvature on the topological structure of a manifold (positive versus negative curvature). Lie groups. The Chern-Weil description of characteristic classes, the Gauss-Bonnet theorem, and possibly the Hodge Theorem.

Terms Offered: Winter Prerequisite(s): MATH 31800

# MATH 31800. Topology and Geometry II. 100 Units.

Topics include: Definition of manifolds, tangent and cotangent bundles, vector bundles. Inverse and implicit function theorems. Sard's theorem and the Whitney embedding theorem. Degree of maps. Vector fields and flows, transversality, and intersection theory. Frobenius' theorem, differential forms and the associated formalism of pullback, wedge product, integration, etc. Cohomology via differential forms, and the de Rham theorem. Further topics may include: compact Lie groups and their representations, Morse theory, cobordism, and differentiable structures on the sphere.

Terms Offered: Winter Prerequisite(s): MATH 31700

# MATH 31900. Topology and Geometry III. 100 Units.

Topics include: Riemannian metrics, connections and curvature on vector bundles, the Levi-Civita connection, and the multiple interpretations of curvature. Geodesics and the associated variational formalism (formulas for the 1st and 2nd variation of length), the exponential map, completeness, and the influence of curvature on the topological structure of a manifold (positive versus negative curvature). Lie groups. The Chern-Weil description of characteristic classes, the Gauss-Bonnet theorem, and possibly the Hodge Theorem.

Terms Offered: Winter Prerequisite(s): MATH 31800

### MATH 32500-32600-32700. Algebra I-II-III.

Algebra I-II-III

## MATH 32500. Algebra I. 100 Units.

Topics include: Representation theory of finite groups, including symmetric groups and finite groups of Lie type; group rings; Schur functors; induced representations and Frobenius reciprocity; representation theory of Lie groups and Lie algebras, highest weight theory, Schur-Weyl duality; applications of representation theory in various parts of mathematics.

Terms Offered: Autumn

Prerequisite(s): MATH 25700-25800-25900, and consent of director or co-director

of undergraduate studies

#### MATH 32600. Algebra II. 100 Units.

This course will explain the dictionary between commutative algebra and algebraic geometry. Topics will include the following. Commutative ring theory; Noetherian property; Hilbert Basis Theorem; localization and local rings; etc. Algebraic geometry: affine and projective varieties, ring of regular functions, local rings at points, function fields, dimension theory, curves, higher-dimensional varieties.

Terms Offered: Winter

Prerequisite(s): MATH 32500

#### MATH 32700. Algebra III. 100 Units.

According to the inclinations of the instructor, this course may cover: algebraic number theory; homological algebra; further topics in algebraic geometry and/or representation theory.

Terms Offered: Spring Prerequisite(s): MATH 32600

#### MATH 32600. Algebra II. 100 Units.

This course will explain the dictionary between commutative algebra and algebraic geometry. Topics will include the following. Commutative ring theory; Noetherian property; Hilbert Basis Theorem; localization and local rings; etc. Algebraic geometry: affine and projective varieties, ring of regular functions, local rings at points, function fields, dimension theory, curves, higher-dimensional varieties.

Terms Offered: Winter Prerequisite(s): MATH 32500

# MATH 32700. Algebra III. 100 Units.

According to the inclinations of the instructor, this course may cover: algebraic number theory; homological algebra; further topics in algebraic geometry and/or representation theory.

Terms Offered: Spring

Prerequisite(s): MATH 32600

# MATH 37500. Algorithms in Finite Groups. 100 Units.

We consider the asymptotic complexity of some of the basic problems of computational group theory. The course demonstrates the relevance of a mix of mathematical techniques, ranging from combinatorial ideas, the elements of probability theory, and elementary group theory, to the theories of rapidly mixing Markov chains, applications of simply stated consequences of the Classification of Finite Simple Groups (CFSG), and, occasionally, detailed information about finite simple groups. No programming problems are assigned.

Instructor(s): L. Babai Terms Offered: Spring

Prerequisite(s): Consent of department counselor. Linear algebra, finite fields, and a first course in group theory (Jordan-Holder and Sylow theorems) required; prior knowledge of algorithms not required

Note(s): This course is offered in alternate years.

Equivalent Course(s): CMSC 36500

# MATH 38300. Numerical Solutions to Partial Differential Equations. 100 Units.

This course covers the basic mathematical theory behind numerical solution of partial differential equations. We investigate the convergence properties of finite element, finite difference and other discretization methods for solving partial differential equations, introducing Sobolev spaces and polynomial approximation theory. We emphasize error estimators, adaptivity, and optimal-order solvers for linear systems arising from PDEs. Special topics include PDEs of fluid mechanics, max-norm error estimates, and Banach-space operator-interpolation techniques. Instructor(s): L. R. Scott Terms Offered: Spring. This course is offered in alternate years.

Prerequisite(s): Consent of department counselor and instructor

Equivalent Course(s): CMSC 38300

# MATH 38509. Advanced Topics: Probability. 100 Units.

This course will include the following topics: continuous-time martingales, Brownian motion, Levy processes, Ito integral and stochastic calculus, and stochastic differential equations and diffusions. Topics may vary.

Terms Offered: Autumn

Prerequisite(s): STAT 38300 or consent of instructor

Equivalent Course(s): STAT 38500

# MATH 38815. Geometric Complexity. 100 Units.

This course provides a basic introduction to geometric complexity theory, an approach to the P vs. NP and related problems through algebraic geometry and representation theory. No background in algebraic geometry or representation theory will be assumed.

Instructor(s): K. Mulmuley Terms Offered: Autumn. This course is offered in alternate years.

Prerequisite(s): Consent of department counselor and instructor

Note(s): Background in algebraic geometry or representation theory not required Equivalent Course(s): CMSC 38815



# DEPARTMENT OF PHYSICS

#### Chair

• Edward Blucher

#### **Professors**

- · Edward C. Blucher
- · Marcela Carena
- John Eric Carlstrom, Astronomy & Astrophysics
- Cheng Chin
- Henry J. Frisch
- Philippe M. Guyot Sionnest, Chemistry
- · Jeffrey A. Harvey
- · Eric Isaacs
- Heinrich Martin Jaeger
- Woowon Kang
- Kwang Je Kim
- Young Kee Kim
- David Kutasov
- · Kathryn Levin
- · Peter Littlewood
- · Zheng Tian Lu
- Emil J. Martinec
- Gene F. Mazenko
- Frank S. Merritt
- Stephan Meyer, Astronomy & Astrophysics
- · Sidney R. Nagel
- · Pier Oddone
- · Mark J. Oreglia
- Paolo Privitera, Astronomy & Astrophysics
- Thomas F. Rosenbaum
- Robert Rosner, Astronomy & Astrophysics
- Guy Savard
- · Melvyn J. Shochet
- Dam T. Son
- Michael Turner, Astronomy & Astrophysics
- Carlos E.M. Wagner
- Yau Wai Wah
- · Robert M. Wald

- Paul B. Wiegmann
- Thomas A. Witten

**Associate Professors** 

- Juan I. Collar
- · Margaret Gardel
- Savdeep Sethi
- Scott Wakely
- · LianTao Wang
- · Wendy Zhang

**Assistant Professors** 

- David Biron
- Luca Grandi
- · Richard Hill
- Daniel Holz
- William Irvine
- · Michael Levin
- Michael Rust, Molecular Genetics and Cell Biology
- David Schuster
- David Schmitz
- Jonathan Simon
- Abigail Vieregg

**Emeritus Faculty** 

- Isaac D. Abella
- James W. Cronin
- Dean Eastman
- Peter G.O. Freund
- Robert P. Geroch
- Luca Grandi
- Roger H. Hildebrand
- · Leo P. Kadanoff
- Riccardo Levi Setti
- Dietrich Müller
- · Yoichiro Nambu
- · Eugene Parker
- James E. Pilcher
- Jonathan L. Rosner
- · John P. Schiffer
- S. Courtney Wright

The Department of Physics (http://physics.uchicago.edu) offers advanced degree opportunities in many areas of experimental and theoretical physics, supervised by

a distinguished group of research faculty. Applications are accepted from students of diverse backgrounds and institutions: graduates of research universities or four year colleges, from the U.S. and worldwide. Most applicants, but not all, have undergraduate degrees in physics; many have had significant research experience. Seeking to identify the most qualified students who show promise of excellence in research and teaching, the admissions process is highly selective and very competitive.

# DOCTOR OF PHILOSOPHY

During the first year of the doctoral program, a student takes introductory graduate physics courses and usually serves as a teaching assistant assigned to one of the introductory or intermediate undergraduate physics courses. Students are encouraged to explore research opportunities during their first year. Students are also encouraged to take the candidacy examination as soon as they feel that they are prepared for it. After passing the candidacy exam and identifying a research sponsor, the student begins dissertation research while completing course requirements. Within a year after research begins, a Ph.D. committee is formed with the sponsor as chairman. A student continues research, from time to time consulting with the members of the committee, until completion of the dissertation. The average length of time for completion of the Ph.D. program in physics is about six years. In addition to fulfilling University and divisional requirements, a candidate for the degree of Doctor of Philosophy in physics must:

- 1. Pass the candidacy examination. This examination on basic physics covers fundamental material usually studied in upper division undergraduate courses (mechanics, electricity and magnetism, special relativity, statistical mechanics, and quantum mechanics) and requires some knowledge of particles and fields and of the structure of matter. The candidacy examination is given every September and March and must be passed by the autumn quarter of the student's third year after matriculation.
- Fulfill the experimental physics requirement by completing PHYS 33400 or PHYS 33500 Adv Experimental Physics Project.
- 3. Pass four post candidacy advanced graduate courses devoted to the broad physics research areas of (A) Condensed Matter Physics, (B) Particle Physics, (C) Large Scale Physics (i.e. Astrophysics and/or Cosmology related), and (D) Intermediate Electives. The four courses selected must include at least one from each of the categories (A), (B), and (C).
- Pass two other advanced (40000 level) courses either in physics or in a field related to the student's Ph.D. research. The latter requires department approval.
- 5. Within the first year after beginning research, convene a first meeting of the Ph.D. committee to review plans for the proposed thesis research and for fulfilling the remaining Ph.D. requirements.
- One to two quarters prior to the defense of the dissertation, hold a pre-oral meeting at which the student and the Ph.D. committee discuss the research project.

- 7. Defend the dissertation before the Ph.D. committee.
- 8. Submit for publication to a refereed scientific journal the thesis which has been approved by the Ph.D. committee or a paper based on the thesis. A letter from the editor acknowledging receipt of the thesis must be provided to the department office.

Consult a department adviser for more details.

# MASTER OF SCIENCE

The graduate program of the Department of Physics is oriented toward students who intend to earn a Ph.D. degree in physics. Therefore, the department does not offer admission to students whose goal is the Master of Science degree. However, the department does offer a master's degree to students who are already in the physics Ph.D. program or other approved graduate programs in the University. Normally it takes one and a half years for a student to complete the master's program. A master's degree is not required for continued study toward the doctorate.

In addition to fulfilling University and Divisional requirements, a candidate for the degree of Master of Science in physics must:

1. Demonstrate a satisfactory level of understanding of the fundamental principles of physics by either (a) passing the Ph.D. candidacy examination at the master's level or higher or (b) passing nine approved courses with a minimum grade point average of 2.5. Six of the nine courses must be:

PHYS 31600	Advanced Classical Mechanics	100
PHYS 33000	Mathematical Methods of Physics	100
PHYS 34100	Advanced Quantum Mechanics I	100
PHYS 34200	Advanced Quantum Mechanics II	100
PHYS 32200	Advanced Electrodynamics I	100
PHYS 35200	Statistical Mechanics	100

Complete the Experimental Physics requirement (PHYS 33400 or PHYS 33500 Adv Experimental Physics Project).

#### TEACHING OPPORTUNITIES

Part of the training of graduate students is dedicated to obtaining experience and facility in teaching. Most first year students are supported by teaching assistantships, which provide the opportunity for them to engage in a variety of teaching related activities. These may include supervising undergraduate laboratory sections, conducting discussion and problem sessions, holding office hours, and grading written work for specific courses. Fellowship holders are invited to participate in these activities at reduced levels of commitment to gain experience in the teaching of physics. During the Autumn quarter first year graduate students attend the weekly workshop, Teaching and Learning of Physics, which is an important element in their training as teachers of physics.

# TEACHING FACILITIES

All formal class work takes place in the modern lecture halls and classrooms and instructional laboratories of the Kersten Physics Teaching Center. This building also houses special equipment and support facilities for student experimental projects, departmental administrative offices, and meeting rooms. The center is situated on the science quadrangle near the John Crerar Science Library, which holds over 1,000,000 volumes and provides modern literature search and data retrieval systems.

# RESEARCH FACILITIES

Most of the experimental and theoretical research of Physics faculty and graduate students is carried out within the Enrico Fermi Institute (http://efi.uchicago.edu), the James Franck Institute (http://jfi.uchicago.edu) and the Institute for Biophysical Dynamics (http://ibd.uchicago.edu). These research institutes provide close interdisciplinary contact, crossing the traditional boundaries between departments. This broad scientific endeavor is reflected in students' activities and contributes to their outlook toward research.

In the Enrico Fermi Institute, members of the Department of Physics carry out theoretical research in particle theory, string theory, field theory, general relativity, and theoretical astrophysics and cosmology. There are active experimental groups in high energy physics, nuclear physics, astrophysics and space physics, infrared and optical astronomy, and microwave background observations. Some of this research is conducted at the Fermi National Accelerator Laboratory, at Argonne National Laboratory (both of these are near Chicago), and at the European Organization for Nuclear Research (CERN) in Geneva, Switzerland.

Physics faculty in the James Franck Institute study chemical, solid state, condensed matter, and statistical physics. Fields of interest include chaos, chemical kinetics, critical phenomena, high Tc superconductivity, nonlinear dynamics, low temperature, disordered and amorphous systems, the dynamics of glasses, fluid dynamics, surface and interface phenomena, nonlinear and nanoscale optics, unstable and metastable systems, laser cooling and trapping, atomic physics, and polymer physics. Much of the research utilizes specialized facilities operated by the institute, including a low temperature laboratory, a materials preparation laboratory, x-ray diffraction and analytical chemistry laboratories, laser equipment, a scanning tunneling microscope, and extensive shop facilities. Some members of the faculty are involved in research at Argonne National Laboratory.

The Institute for Biophysical Dynamics includes members of both the Physical Sciences and Biological Sciences Divisions, and focuses on the physical basis for molecular and cellular processes. This interface between the physical and biological sciences is an exciting area that is developing rapidly, with a bi-directional impact. Research topics include the creation of physical materials by biological self assembly, the molecular basis of macromolecular interactions and cellular signaling, the derivation of sequence structure function relationships by computational means, and structure function relationships in membranes.

In the areas of chemical and atomic physics, research toward the doctorate may be done in either the physics or the chemistry department. Facilities are available for research in crystal chemistry; molecular physics; molecular spectra from infrared to far ultraviolet, Bose Einstein condensation, and Raman spectra, both experimental and theoretical; surface physics; statistical mechanics; radio chemistry; and quantum electronics.

Interdisciplinary research leading to a Ph.D. degree in physics may be carried out under the guidance of faculty committees including members of other departments in the Division of the Physical Sciences, such as Astronomy & Astrophysics, Chemistry, Computer Science, Geophysical Sciences or Mathematics, or related departments in the Division of the Biological Sciences.

# ADMISSION AND STUDENT AID

Most students entering the graduate program of the Department of Physics of the University of Chicago hold a bachelor's or master's degree in physics from an accredited college or university.

December 28 is the deadline for applications for admission in the following autumn quarter. The Graduate Record Examination (GRE) given by the Educational Testing Service is required of all applicants. Applicants should submit recent scores on the verbal, quantitative, and analytic writing tests and on the advanced subject test in physics. Arrangements should be made to take the examination no later than September in order that the results be available in time for the department's consideration. Applicants from non-English speaking countries must provide the scores achieved on the TOEFL or the IELTS.

All full time physics graduate students in good standing receive financial aid. Most graduate students serve as teaching assistants in their first year.

For information regarding application for admission, e-mail physics@uchicago.edu or write to: Graduate Affairs, Department of Physics, University of Chicago, 5720 South Ellis Avenue, Chicago, IL 60637-1434. A departmental counselor will be glad to answer questions. Use URL http://physics.uchicago.edu/ to access the department's World Wide Web home page for further information.

### PHYSICS COURSES

#### PHYS 31600. Advanced Classical Mechanics. 100 Units.

This course begins with variational formulation of classical mechanics of point particles, including discussion of the principle of least action, Poisson brackets, and Hamilton-Jacobi theory. These concepts are generalized to continuous systems with infinite number of degrees of freedom, including a discussion of the transition to quantum mechanics.

Terms Offered: Autumn Prerequisite(s): PHYS 18500

# PHYS 32200-32300. Advanced Electrodynamics I-II.

This two-quarter sequence covers electromagnetic properties of continuous media, gauge transformations, electromagnetic waves, radiation, relativistic electrodynamics, Lorentz theory of electrons, and theoretical optics. There is considerable emphasis on the mathematical methods behind the development of the physics of these problems.

# PHYS 32200. Advanced Electrodynamics I. 100 Units.

Terms Offered: Winter

Prerequisite(s): PHYS 22700 and 23500

### PHYS 32300. Advanced Electrodynamics II. 100 Units.

Terms Offered: Spring Prerequisite(s): PHYS 32200

#### PHYS 32300. Advanced Electrodynamics II. 100 Units.

Terms Offered: Spring Prerequisite(s): PHYS 32200

#### PHYS 33000. Mathematical Methods of Physics. 100 Units.

Topics include complex analysis, linear algebra, differential equations, boundary value problems, and special functions.

Terms Offered: Autumn Prerequisite(s): PHYS 22700

## PHYS 33500. Adv Experimental Physics Project. 100 Units.

For course description contact Physics.

#### PHYS 34100-34200. Advanced Quantum Mechanics I-II.

This two-quarter sequence covers wave functions and their physical content, onedimensional systems, WKB method, operators and matrix mechanics, angular momentum and spin, two- and three-dimensional systems, the Pauli principle, perturbation theory, Born approximation, and scattering theory.

# PHYS 34100. Advanced Quantum Mechanics I. 100 Units.

Terms Offered: Autumn Prerequisite(s): PHYS 23500

#### PHYS 34200. Advanced Quantum Mechanics II. 100 Units.

Terms Offered: Winter Prerequisite(s): PHYS 34100

# PHYS 34200. Advanced Quantum Mechanics II. 100 Units.

Terms Offered: Winter Prerequisite(s): PHYS 34100

# PHYS 35200. Statistical Mechanics. 100 Units.

This course covers principles of statistical mechanics and thermodynamics, as well as their applications to problems in physics and chemistry.

Terms Offered: Winter

Prerequisite(s): PHYS 19700 and 23500



# DEPARTMENT OF STATISTICS

#### Chair

- Yali Amit
  - **Professors**
- Yali Amit
- Mihai Anitescu, Argonne National Laboratory
- Nicolas Brunel
- Paul Fischer, Argonne National Laboratory
- Lars Hansen, Economics
- · John Lafferty
- Steven P. Lalley
- Gregory F. Lawler, Mathematics
- · Peter McCullagh
- Mary Sara McPeek
- · Per Mykland
- Dan Liviu Nicolae, Medicine
- John Reinitz
- · Michael L. Stein
- Matthew Stephens
- Stephen M. Stigler
- · Ronald Thisted, Health Studies
- Kirk M. Wolter
- Wei Biao Wu

**Assistant Professors** 

- Rina Foygel Barber
- Jian Ding
- Imre Risi Kondor, Computer Science
- · Lek-Heng Lim
- · Debashis Mondal
- Ionathan Weare

William H. Kruskal Scholars

- Kendra S. Burbank
- · Xiang Zhou
  - Senior Lecturers
- Linda Brant Collins
- · Mei Wang
  - Lecturer
- Yibi Huang

#### Visiting Professors

- · James O. Berger
- · Leonard A. Smith

The Department of Statistics offers an exciting and revamped graduate program that prepares students for cutting-edge interdisciplinary research in a wide variety of fields. The field of statistics has become a core component of research in the biological, physical, and social sciences, as well as in traditional computer science domains such as artificial intelligence. In light of this, the Department of Statistics is currently undergoing a major expansion of approximately ten new faculty into fields of Computational and Applied Mathematics. The massive increase in the data acquired, through scientific measurement on one hand and through web-based collection on the other, makes the development of statistical analysis and prediction methodologies more relevant than ever. Our graduate program aims to prepare students to address these issues through rigorous training in theory, methodology, and applications of statistics; rigorous training in scientific computation; and research projects in core methodology of statistics and computation as well as in a wide variety of interdisciplinary fields.

The Department of Statistics offers two tracks of graduate study, one leading to the Master of Science (M.S.) degree, the other to the Doctorate of Philosophy (Ph.D.). The M.S. degree is a professional degree. Students who receive this degree are prepared for nonacademic careers in which the use of advanced statistical and computational methods is of central importance. The program also prepares students for possible further graduate study.

During the first year of the Ph.D. program, students are given a thorough grounding in material that forms the foundations of modern statistics and scientific computation, including data analysis, mathematical statistics, probability theory, applied probability and modeling, and computational methods. Throughout the entire program, students attend a weekly consulting seminar where researchers from across the University come to get advice on modeling, statistical analysis, and computation. This seminar is often the source of interesting and ongoing research projects.

In the second year, students have a wide range of choices of topics they can pursue further, based on their interests, through advanced courses and reading courses with faculty. During the second year, students will typically identify their subfield of interest, take some advanced courses in the subject, and interact with the relevant faculty members. The Department maintains very strong connections to numerous other units on campus, either through joint appointments of the faculty or through ongoing collaborations. Students have easy access to faculty in other departments, which allows them to expand their interactions and develop new interdisciplinary research projects. Examples include joint projects with Human Genetics, Ecology and Evolution, Neurobiology, Chemistry, Economics, Health Studies, and Astronomy.

# Programs and Requirements for the Ph.D.

All sufficiently well-prepared students take 3 of 4 sequences in their first year:

- Applied Statistics
- · Theoretical Statistics
- · Probability
- · Computation and Machine Learning

All students pass prelim exams in 2 of the 4 subjects by the beginning of their second year. Well-prepared students may be allowed to pass one or both of their exams upon arrival. Students should take a distribution requirement of up to two courses in their second year and are otherwise encouraged to explore the great variety of graduate courses on offer, both inside the department and in other departments.

Starting in their second year, students should find a topic for a Ph.D. dissertation and establish a relationship with a Ph.D. adviser. Taking courses with potential advisers is part of this process. The detailed process is listed here (http://www.stat.uchicago.edu/students/phd\_rules.shtml).

# The Ph.D.: Training in Teaching, Presentation, and Consulting

Part of every statistician's job is to evaluate the work of others and to communicate knowledge, experience, and insights. Every statistician is, to some extent, an educator, and the department provides graduate students with training for this aspect of their professional lives. The department expects all doctoral students, regardless of their professional objectives and sources of financial support, to take part in a graduated program of participation in some or all phases of instruction, from grading, course assisting, and conducting discussion sections, to being a lecturer with responsibility for an entire course.

Students also receive training in how to present research in short seminars in the first and second years of study. Later, students present their own work in a dissertation proposal and, eventually, in a thesis defense. The student seminars are listed here (http://galton.uchicago.edu/seminars/student-seminars.shtml).

Ph.D. students should also participate in the department's consulting program (http://galton.uchicago.edu/consulting/index.shtml), which is led by faculty members and exposes the students to empirical projects inside the university. Projects are carried out by groups of students under the guidance of a faculty member. The client is a researcher in an applied area, usually associated with the university. An informal seminar meets regularly over lunch to provide a forum for presenting and discussing problems, solutions, and topics in statistical consultation. Students present interesting or difficult consulting problems to the seminar as a way of stimulating wider consideration of the problem and as a means of developing familiarity with the kinds of problems and lines of attack involved. Often the client will participate in the presentation and discussion.

#### Programs and Requirements for the M.S. degree

The main requirements of the M.S. program are a sequence of at least nine approved courses plus a Master's paper. Students may take up to two years of courses. A detailed set of regulations can be found here (http://galton.uchicago.edu/admissions/master.shtml). A substantial fraction of available courses are the same as for the Ph.D. degree.

#### **Facilities**

Almost all departmental activities—classes, seminars (http://galton.uchicago.edu/seminars/dept\_seminar.shtml), computation (http://galton.uchicago.edu/local/computing), and student and faculty offices (http://galton.uchicago.edu/people)—are located in Eckhart Hall or neighboring Ryerson Hall. Each student is assigned a desk in one of several offices. A small departmental library and conference room is a common meeting place for formal and informal gatherings of students and faculty. The major computing facilities of the department are based upon a network of PCs running mainly Linux. One computer room currently houses many of these PCs; these rooms are directly and primarily for graduate students in the Statistics Department. In addition, all student offices have limited computer facilities. For further information, consult the department's computing policies (http://www.stat.uchicago.edu/local/computing/policies/index.shtml).

# Statistics Throughout the University

In addition to the courses, seminars, and programs in the Department of Statistics, courses and workshops of direct interest to statisticians occur throughout the University, most notably in the programs in statistics and econometrics in the Booth School of Business (http://www.chicagobooth.edu) and in the research programs in Health Studies (http://health.bsd.uchicago.edu), Human Genetics (http://www.genes.uchicago.edu), Financial Mathematics and Econometrics (http://stevanovichcenter.uchicago.edu/seminars), Computer Science (http://www.cs.uchicago.edu), Economics (http://economics.uchicago.edu) and NORC (http://www.norc.uchicago.edu) (formerly the National Opinion Research Center). The large number of statistics related seminars (http://galton.uchicago.edu/seminars/index.shtml) is perhaps the best indication of the vibrancy of the statistics research community here at the University of Chicago.

### STATISTICS COURSES

#### STAT 30100. Mathematical Statistics I. 100 Units.

This course is part of a two-quarter sequence on the theory of statistics. Topics will include exponential, curved exponential, and location-scale families; mixtures, hierarchical and conditional modeling including compatibility of conditional distributions; multivariate normal and joint distributions of quadratic forms of multivariate normal; principles of estimation; identifiability, sufficiency, minimal sufficiency, ancillarity, completeness; properties of the likelihood function and likelihood-based inference, both univariate and multivariate, including examples in which the usual regularity conditions do not hold; multivariate information inequality. Part of the course will be devoted to elementary asymptotic methods that are useful in the practice of statistics, including methods to derive asymptotic distributions of various estimators and test statistics, such as Pearson's chi-square, standard and nonstandard asymptotics of maximum likelihood estimators, asymptotics of order statistics and extreme order statistics, Cramer's theorem including situations in which the second-order term is needed, asymptotic efficiency. Other topics (e.g., methods for dependent observations) may be covered if time permits.

Terms Offered: Winter

Prerequisite(s): STAT 30400 or consent of instructor

#### STAT 30210. Bayesian Analysis and Principles of Statistics. 100 Units.

This course continues the development of Mathematical Statistics, with an emphasis on Bayesian analysis and underlying principles of inference. Topics include Bayesian Inference and Computation, Frequentist Inference and interpretation of p values and confidence intervals, Decision theory, admissibility and Stein's paradox, the Likelihood principle, Exchangeability and De Finetti's theorem, hierarchical modelling, multiple comparisons and False Discovery Rates. The mathematical level will generally be at that of an easy advanced calculus course. We will assume familiarity with standard statistical distributions (e.g., Normal, Poisson, Binomial, Exponential), with the laws of probability, expectation, conditional expectation, etc, and exposure to common statistical concepts such as p values and confidence intervals. Familiarity with the R statistical language will be helpful. Concepts will be illustrated mainly by instructive "toy" examples, where calculations can be done by hand. However, we will also study more complex, practical applications of Bayesian statistics. Although some basic methods of computation will be discussed, the primary focus will be on concepts and not on computation.

Terms Offered: Spring

Prerequisite(s): STAT 30400 or consent of instructor

# STAT 30400. Distribution Theory. 100 Units.

This course is a systematic introduction to random variables and probability distributions. Topics include standard distributions (i.e., uniform, normal, beta, gamma, *F*, *t*, Cauchy, Poisson, binomial, and hypergeometric); moments and cumulants; characteristic functions; exponential families; modes of convergence; central limit theorem; other asymptotic approximations.

Terms Offered: Autumn

Prerequisite(s): STAT 24500 and MATH 20500, or consent of instructor

#### STAT 30600. Advanced Statistical Inference I. 100 Units.

Topics covered in this course will include: Gaussian distributions: conditional distributions; maximum likelihood and REML; Laplace approximation and associated expansion; combinatorics and the partition lattice: Mobius inversion; moments, cumulants symmetric functions and \$k\$-statistics; cluster expansions; Bartlett identities and Bartlett adjustment; random partitions, partition processes, CRP process; Gauss-Ewens cluster process: classification models; trees rooted and unrooted; exchangeable random trees; Cox processes used for classification.

Terms Offered: Autumn

Prerequisite(s): Consent of instructor

# STAT 30750. Numerical Linear Algebra. 100 Units.

This course is devoted to the basic theory of linear algebra and its significant applications in scientific computing. The main objective is to provide a working knowledge of linear algebra and matrix computation suitable for advanced studies in which numerical methods are in demand, such as in statistics, econometrics, and scientific data organization and computation. Topics covered will include: Gaussian elimination, LU decomposition, vector spaces, linear transformations and their matrix representations, orthogonality and projections, QR factorization, eigenvectors and eigenvalues, diagonalization of real symmetric and complex Hermitian matrices, the spectral theorem, Cholesky decomposition, and Singular Value Decomposition. In addition, students will program in MATLAB or R using basic algorithms for linear systems, eigenvalue problem, matrix factorization, and sensitivity analysis.

Terms Offered: Autumn

Prerequisite(s): Multivariate calculus (MATH 19520 or 20000, or equivalent)

Equivalent Course(s): STAT 24300

#### STAT 30800. Advanced Statistical Inference II. 100 Units.

This course will discuss the following topics in high-dimensional statistical inference: random matrix theory and asymptotics of its eigen-decompositions, estimation and inference of high-dimensional covariance matrices, large dimensional factor models, multiple testing and false discovery control and high-dimensional semiparametrics. On the methodological side, probability inequalities, including exponential, Nagaev, and Rosenthal-type inequalities will be introduced. Terms Offered: Winter

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Prerequisite(s): STAT 30200 or consent of instructor

# STAT 30900. Mathematical Computation I: Matrix Computation Course. 100 Units.

This is an introductory course on numerical linear algebra, which is quite different from linear algebra. We will be much less interested in algebraic results that follow from axiomatic definitions of fields and vector spaces but much more interested in analytic results that hold only over the real and complex fields. The main objects of interest are real- or complex-valued matrices, which may come from differential operators, integral transforms, bilinear and quadratic forms, boundary and coboundary maps, Markov chains, correlations, DNA microarray measurements, movie ratings by viewers, friendship relations in social networks, etc. Numerical linear algebra provides the mathematical and algorithmic tools for analyzing these matrices.

Topics covered: basic matrix decompositions LU, QR, SVD; Gaussian elimination and LU/LDU decompositions; backward error analysis, Gram-Schmidt orthogonalization and QR/complete orthogonal decompositions; solving linear systems, least squares, and total least squares problem; low-rank matrix approximations and matrix completion. We shall also include a brief overview of stationary and Krylov subspace iterative methods; eigenvalue and singular value problems; and sparse linear algebra.

Terms Offered: Autumn

Prerequisite(s): Linear algebra (STAT 24300 or equivalent) and some previous

experience with statistics

Equivalent Course(s): CMSC 37810

#### STAT 31015. Mathematical Computation IIA: Convex Optimization. 100 Units.

This course covers the fundamentals of convex optimization. Topics will include basic convex geometry and convex analysis, KKT condition, Fenchel and Lagrange duality theory; six standard convex optimization problems and their properties and applications: linear programming, geometric programming, second-order cone programming, semidefinite programming, linearly and quadratically constrained quadratic programming. In the last part of the course we will examine the generalized moment problem --- a powerful technique that allows one to encode a wide variety of problems (in probability, statistics, control theory, financial mathematics, signal processing, etc) and solve them or their relaxations as convex optimization problems.

Terms Offered: Winter

Prerequisite(s): STAT 30900/CMSC 37810

# STAT 31020. Mathematical Computation IIB: Nonlinear Optimization. 100 Units.

This course covers the fundamentals of continuous optimization with an emphasis on algorithmic and computational issues. The course starts with the study of optimality conditions and techniques for unconstrained optimization, covering line search and trust region approaches, and addressing both factorization-based and iterative methods for solving the subproblems. The Karush-Kuhn-Tucker conditions for general constrained and nonconvex optimization are then discussed and used to define algorithms for constrained optimization including augmented Lagrangian, interior-point and (if time permits) sequential quadratic programming. Iterative methods for large sparse problems, with an emphasis on projected gradient methods, will be presented. Several substantial programming projects (using MATLAB and aiming at both data-intensive and physical sciences applications) are completed during the course.

Terms Offered: Winter

Prerequisite(s): STAT 30900/CMSC 37810

# STAT 31061. Further Mathematical Computation: Matrix Computation. 100 Units.

This course is primarily about iterative algorithms in matrix computation. For linear systems and least squares problems, we will discuss stationary methods (Jacobi, Gauss-Seidel, SOR), semi-iterative methods (Richardson, steepest descent, Chebyshev, conjugate gradient), and Krylov subspace methods (MINRES, SYMMLQ, LSQR, GMRES, QMR, BiCG). We will cover some basic ideas for preconditioning and stopping conditions. For eigenvalue problems, we will discuss direct (Givens and Householder) and iterative (Lanczos and Arnoldi) methods for reducing a matrix into tridiagonal and Hessenberg forms, as well as power, inverse power, Rayleigh quotient, Jacobi, Jacobi-Davidson, and Francis QR algorithms for extraction of eigenvalues/eigenvectors. Lastly, we will discuss algorithms for generalized and quadratic eigenvalue problems (QZ algorithm) as well as for singular value decomposition (Golub-Kahan and Golub-Reinsch).

Terms Offered: Winter

Prerequisite(s): STAT 30900/CMSC 37810

# STAT 31070. Modern Approximation Theory. 100 Units.

This is an introductory course to approximation theory, i.e., the study of how functions can be approximated by simpler functions or linear combinations of simpler functions. It will start with classical topics but will gradually progress to more recent advances. The objective is to cover a broad range of topics at the expense of giving an in-depth treatment to only a small handful of them. We will introduce the notions of Hamel basis, Schauder basis, orthonormal basis, dual basis, biorthogonal basis, Riesz basis, frame, dictionary, coherence, restricted isometry property, Weierstrauss and Stone-Weierstrauss theorems, Mercer kernel, reproducing kernel Hilbert space. We will discuss specific bases/dictionaries including: Taylor series, Fourier and generalized Fourier series, Chebyshev and orthogonal polynomials, splines, wavelets (also beamlets, ridgelets, curvelets, bandelets, noiselets). As for algorithms, we will examine Pade approximation, nonlinear approximation, best r-term approximation, greedy approximation, discrete cosine, Fourier and wavelet transforms, FFT and fast wavelet transform. Last but not least, we will look briefly at a few applications including compression, interpolation, JPEG and JPEG 2000, compressive sensing, matrix completion, finiteelement and spectral methods, and support vector machines.

Terms Offered: Spring

Prerequisite(s): Basic linear algebra and functional analysis

# STAT 31100. Mathematical Computation III: Numerical Methods for PDE's. 100 Units.

The first part of this course introduces basic properties of PDE's; finite difference discretizations; and stability, consistency, convergence, and Lax's equivalence theorem. We also cover examples of finite difference schemes; simple stability analysis; convergence analysis and order of accuracy; consistency analysis and errors (i.e., dissipative and dispersive errors); and unconditional stability and implicit schemes. The second part of this course includes solution of stiff systems in 1, 2, and 3D; direct vs. iterative methods (i.e., banded and sparse LU factorizations); and Jacobi, Gauss-Seidel, multigrid, conjugate gradient, and GMRES iterations.. Terms Offered: Spring

Prerequisite(s): Some prior exposure to differential equations and linear algebra Equivalent Course(s): CMSC 37812

# STAT 31200. Introduction to Stochastic Processes I. 100 Units.

This course introduces stochastic processes not requiring measure theory. Topics include branching processes, recurrent events, renewal theory, random walks, Markov chains, Poisson, and birth-and-death processes.

Prerequisite(s): STAT 25100 and MATH 20500; STAT 30400 or consent of instructor

#### STAT 31300. Introduction to Stochastic Processes II. 100 Units.

Topics include continuous-time Markov chains, Markov chain Monte Carlo, discrete-time martingales, and Brownian motion and diffusions. Our emphasis is on defining the processes and calculating or approximating various related probabilities. The measure theoretic aspects of these processes are not covered rigorously.

Terms Offered: Spring

Prerequisite(s): STAT 31200 or consent of instructor

Note(s): Not offered in 2013-14

#### STAT 31510. Stochastic Simulation I. 100 Units.

This class primarily concerns the design and analysis of Monte Carlo sampling techniques for the estimation of averages with respect to high dimensional probability distributions. Standard simulation tools such as importance sampling, Metropolis-Hastings, Langevin dynamics, and hybrid Monte Carlo will be introduced along with basic theoretical concepts regarding their convergence to equilibrium. The class will explore applications of these methods in Bayesian statistics and machine learning as well as to other simulation problems arising in the physical and biological sciences. Particular attention will be paid to the major complicating issues like conditioning (with analogies to optimization) and rare events and methods to address them.

Terms Offered: Autumn

#### STAT 31520. Stochastic Simulation II. 100 Units.

This course concerns the estimation of the dynamic properties of time-dependent stochastic systems. The class will begin with an introduction to the numerical simulation of continuous time Markov processes including the discretization of stochastic (and ordinary) differential equations. Problems associated with multiple time scales will be discussed along with methods to address them (implicit discretizations, multiscale methods and dimensional reduction). The class will also cover interacting particle methods and other techniques for the efficient simulation of dynamical rare events.

Terms Offered: Spring

#### STAT 31700. Introduction to Probability Models. 100 Units.

This course introduces stochastic processes as models for a variety of phenomena in the physical and biological sciences. Following a brief review of basic concepts in probability, we introduce stochastic processes that are popular in applications in sciences (e.g., discrete time Markov chain, the Poisson process, continuous time Markov process, renewal process and Brownian motion).

Terms Offered: Winter

Prerequisite(s): STAT 24400 or 25100 Equivalent Course(s): STAT 25300

#### STAT 31900. Causal Inference. 100 Units.

This course is designed for graduate students and advanced undergraduate students from social sciences, health science, public policy, and social services administration who will be or are currently involved in quantitative research and are interested in studying causality. The course begins by introducing Rubin's causal model. A major emphasis will be placed on conceptualizing causal questions including intent-to-treat effect, differential treatment effect, mediated treatment effect, and cumulative treatment effect. In addition to comparing alternative experimental, quasi-experimental, and non-experimental designs, we will clarify the assumptions under which a causal effect can be identified and estimated from nonexperimental data. Students will become familiar with causal inference techniques suitable for evaluating binary treatments, concurrent multi-valued treatments, continuous treatments, or time-varying treatments in quasi-experimental or nonexperimental data. These include propensity score matching and stratification, inverse-probability-of-treatment weighting (IPTW) and marginal mean weighting through stratification (MMW-S), regression discontinuity design, and the instrumental variable (IV) method. The course is aimed at equipping students with preliminary knowledge and skills necessary for appraising and conducting causal comparative studies. (M)

Instructor(s): G. Hong Terms Offered: Autumn

Prerequisite(s): Intermediate Statistics

Note(s): Graduate course open to advanced undergraduates. Not offered in the 2013-2014 academic year.

Equivalent Course(s): CHDV 30102

#### STAT 32400. Probability and Statistics. 100 Units.

This Ph.D.-level course (in addition to BUSF 41902/STAT 32500) provides a thorough introduction to Classical and Bayesian statistical theory. The two-quarter sequence provides the necessary probability and statistical background for many of the advanced courses in the Chicago Booth curriculum. The central topic is probability. Basic concepts in probability are covered. An introduction to martingales is given. Homework assignments are given throughout the quarter.

Course description is subject to change. Please visit the Booth portal and search via the course search tool for the most up to date information: http://boothportal.chicagobooth.edu/portal/server.pt/community/course

Terms Offered: Autumn

Prerequisite(s): One year of calculus Equivalent Course(s): BUSF 41901

#### STAT 32500. Statistical Inference. 100 Units.

This Ph.D.-level course is the second in a two-quarter sequence with Business 41901/Statistics 32400. The central topic is statistical inference. The course will focus on inference issues in a variety of linear models. The key models that will be covered are the linear regression model, linear panel data models, and the linear instrumental variable model. The focus of the course will be on developing tools for performing classical inference within these models. We will cover basic asymptotic theory, estimation of covariance matrices allowing for heteroskedasticity and dependence, and the bootstrap. The basics of generalized method of moments will be covered in the context of the linear instrumental variables model. There will also be some discussion of Bayesian inference and finite-sample classical inference.

Course description is subject to change. Please visit the Booth portal and search via the course search tool for the most up to date information: http://boothportal.chicagobooth.edu/portal/server.pt/community/course

Terms Offered: Winter

Prerequisite(s): BUSF 41901/STAT 32400 Equivalent Course(s): BUSF 41902

# STAT 32600. Marketing Topics: Bayesian Applications in Marketing and Micro Econometrics. 100 Units.

This course covers some key topics at the research frontier in quantitative marketing. We formulate and estimate models of consumer decision-making, and then explore the normative and positive consequences of the inferred consumer behavior for optimal marketing decisions and market structure. Topics include: Foundations of demand modeling, measurement of consumer heterogeneity, the origin and evolution of preferences, state dependence in demand, dynamic discrete choice models, learning and memory models, storable goods demand, diffusion models and durable goods demand, stated choice models, advertising dynamics, and search and shopping behavior.

Course description is subject to change. Please visit the Booth portal and search via the course search tool for the most up to date information: http://boothportal.chicagobooth.edu/portal/server.pt/community/course

Terms Offered: Spring

Equivalent Course(s): BUSF 37904

# STAT 32900. Applied Multivariate Analysis. 100 Units.

The course will introduce the basic theory and applications for analyzing multidimensional data. Topics include multivariate distributions, Gaussian models, multivariate statistical inferences and applications, classifications, cluster analysis, and dimension reduction methods.

Course description is subject to change. Please visit the Booth portal and search via the course search tool for the most up to date information: http://boothportal.chicagobooth.edu/portal/server.pt/community/course

Terms Offered: Spring

Prerequisite(s): BUSF 41901/STAT 32400 or BUSF 41902/STAT 32500 or equivalent

courses

Equivalent Course(s): BUSF 41912

# STAT 33100. Sample Surveys. 100 Units.

This course covers random sampling methods; stratification, cluster sampling, and ratio estimation; and methods for dealing with nonresponse and partial response.

Terms Offered: Autumn

Prerequisite(s): Consent of instructor

# STAT 33211. Mediation, Moderation, and Spillover Effects. 100 Units.

This course is designed for graduate students and advanced undergraduate students from social sciences, statistics, health studies, public policy, and social services administration who will be or are currently involved in quantitative research. The course is focused on methodological issues with regard to mediation of intervention effects, moderated intervention effects, cumulative effects of treatment sequences, and spillover effects in a variety of settings. Research questions about why an intervention works, for whom, under what conditions, in what sequence, and whether one individual's treatment could affect other individuals' outcomes are often key to the advancement of scientific knowledge yet pose major analytic challenges. (M)

Instructor(s): G. Hong Terms Offered: Autumn

Note(s): Not offered 2013-14

Equivalent Course(s): PSYC 32411, PBPL 29411, CCTS 32411, CHDV 32411

# STAT 33500. Time-Series Analysis/Forecast. 100 Units.

Forecasting plays an important role in business planning and decision-making. This Ph.D.-level course discusses linear time series models that have been widely used in business and economic data analysis and forecasting. Both theory and methods of the models are discussed. Real examples are used throughout the course to illustrate applications. The topics covered include: (1) stationary and unit-root non-stationary processes; (2) linear dynamic models, including autoregressive integrated moving average models; (3) model building and data analysis; (4) prediction and forecasting evaluation; (5) asymptotic theory for estimation including unit-root theory; (6) transfer function (distributed lag) models; (7) regression model with time series errors; (8) structural changes and outlier detection; (9) state-space models and Kalman filter; and (10) nonlinear models if time permits.

Course description is subject to change. Please visit the Booth portal and search via the course search tool for the most up to date information: http://boothportal.chicagobooth.edu/portal/server.pt/community/course

Terms Offered: Winter

Prerequisite(s): BUSF 41901/STAT 32400 or instructor consent

Equivalent Course(s): BUSF 41910

# STAT 33560. Chaos and Predictability. 100 Units.

This course provides an introduction to the analysis both of nonlinear dynamical systems and of actual systems best described by nonlinear models. A geometric view of linear and nonlinear time series analysis is developed. Mathematical chaos will be defined and then used to exemplify the strengths, weaknesses and risks of applying linear intuitions in a nonlinear context. Prediction, predictability, forecast evaluation will also be considered in this context. The student will develop a software toolkit for the analysis and modelling, questions of which methods to employ (linear/non-linear, deterministic/stochastic). The efficacy of modern methods applied to more tractable mathematical systems is contrasted with their application to the analysis and prediction of actual time series of observations. Options for dealing with the fundamental limitations of applied analysis due to model inadequacy are compared.

Terms Offered: Winter

Prerequisite(s): STAT 24500 or equivalent (can be taken concurrently)

Note(s): Not offered in 2013-14

### STAT 33600. Time Dependent Data. 100 Units.

This course considers the modeling and analysis of data that are ordered in time. The main focus is on quantitative observations taken at evenly spaced intervals and includes both time-domain and spectral approaches.

Terms Offered: Winter or Spring

Prerequisite(s): MATH 15300 and STAT 24400, STAT 24500 or 22400, or consent of instructor

Note(s): Some previous exposure to Fourier series is helpful but not required. Equivalent Course(s): STAT 26100

#### STAT 33610. Asymptotics for Time Series. 100 Units.

This course will present a systematic asymptotic theory for time series analysis. In particular, the class will discuss asymptotics for sample mean, sample variances, banded covariance matrices estimates, inference of trends, periodograms, spectral density estimates, quantile estimation, nonparametric estimates, VaR and long-range dependent processes. Some asymptotic theory for non-stationary processes and functional linear models will also be presented.

Terms Offered: Autumn

Prerequisite(s): BUSF 30200 and STAT 31300 or consent of instructor

# STAT 33700. Multivariate Time Series Analysis. 100 Units.

This course investigates the dynamic relationships between variables. It starts with linear relationships between two variables, including distributed-lag models and detection of unidirectional dependence (Granger causality). Nonlinear and time-varying relationships are also discussed. Dynamic models discussed include vector autoregressive models, vector autoregressive moving-average models, cointegration and error-correction models, state-space models, dynamic factor models, and multivariate volatility models. The course also addresses impulse response function, structural specification, co-integration tests, least squares estimates, maximum likelihood estimates, structural changes, recursive estimation, and Markov Chain Monte Carlo estimation. Empirical data analysis is an integral part of the course. Students are expected to analyze many real data sets. The main software package used in the course is R, but students may use their own software if preferred.

Course description is subject to change. Please visit the Booth portal and search via the course search tool for the most up to date information: http://boothportal.chicagobooth.edu/portal/server.pt/community/course

Terms Offered: Spring

Prerequisite(s): BUSF 41910/STAT 33500 Equivalent Course(s): BUSF 41914

#### STAT 33970. Statistics of High-Frequency Financial Data. 100 Units.

This course is an introduction to the econometric analysis of high-frequency financial data. This is where the stochastic models of quantitative finance meet the reality of how the process really evolves. The course is focused on the statistical theory of how to connect the two, but there will also be some data analysis. With some additional statistical background (which can be acquired after the course), the participants will be able to read articles in the area. The statistical theory is longitudinal, and it thus complements cross-sectional calibration methods (implied volatility, etc.). The course also discusses volatility clustering and market microstructure.

Terms Offered: Spring

Prerequisite(s): STAT 39000/FINM 34500, also some statistics/econometrics background as in STAT 24400–24500, or FINM 33150 and FINM 33400, or equivalent, or consent of instructor.

Equivalent Course(s): FINM 33170

# STAT 34300. Applied Linear Statistical Methods. 100 Units.

This course introduces the theory, methods, and applications of fitting and interpreting multiple regression models. Topics include the examination of residuals, the transformation of data, strategies and criteria for the selection of a regression equation, nonlinear models, biases due to excluded variables and measurement error, and the use and interpretation of computer package regression programs. The theoretical basis of the methods, the relation to linear algebra, and the effects of violations of assumptions are studied. Techniques discussed are illustrated by examples involving both physical and social sciences data.

Terms Offered: Autumn

Prerequisite(s): STAT 24500 or equivalent, and linear algebra (STAT 24300 or equivalent)

#### STAT 34500. Design and Analysis of Experiments. 100 Units.

This course introduces the methodology and application of linear models in experimental design. We emphasize the basic principles of experimental design (e.g., blocking, randomization, incomplete layouts). Many of the standard designs (e.g., fractional factorial, incomplete block, split unit designs) are studied within this context. The analysis of these experiments is developed as well, with particular emphasis on the role of fixed and random effects.

Terms Offered: Winter Prerequisite(s): STAT 34300

#### STAT 34700. Generalized Linear Models. 100 Units.

This applied course covers factors, variates, contrasts, and interactions; exponential-family models (i.e., variance function); definition of a generalized linear model (i.e., link functions); specific examples of GLMs; logistic and probit regression; cumulative logistic models; log-linear models and contingency tables; inverse linear models; Quasi-likelihood and least squares; estimating functions; and partially linear models.

Terms Offered: Spring

Prerequisite(s): STAT 34300 or consent of instructor STAT 35000. Principles of Epidemiology. 100 Units.

This course does not meet requirements for the biological sciences major. Epidemiology is the study of the distribution and determinants of health and disease in human populations. This course introduces the basic principles of epidemiologic study design, analysis, and interpretation through lectures, assignments, and critical appraisal of both classic and contemporary research articles.

Instructor(s): B. Lahey Terms Offered: Autumn

Prerequisite(s): Introductory statistics recommended or Consent of Instructor Equivalent Course(s): HSTD 30900,BIOS 29318,ENST 27400,PPHA 36400

#### STAT 35201. Introduction to Clinical Trials. 100 Units.

This course will review major components of clinical trial conduct, including the formulation of clinical hypotheses and study endpoints, trial design, development of the research protocol, trial progress monitoring, analysis, and the summary and reporting of results. Other aspects of clinical trials to be discussed include ethical and regulatory issues in human subjects research, data quality control, meta-analytic overviews and consensus in treatment strategy resulting from clinical trials, and the broader impact of clinical trials on public health.

Instructor(s): J. Dignam Terms Offered: Spring

Prerequisite(s): HSTD 32100 or STAT 22000; Introductory Statistics or Consent of Instructor

# STAT 35400. Gene Regulation. 100 Units.

This course covers the fundamental theory of gene expression in prokaryotes and eukaryotes through lectures and readings in the primary literature. Natural and synthetic genetic systems arising in the context of *E. coli* physiology and Drosophila development will be used to illustrate fundamental biological problems together with the computational and theoretical tools required for their solution. These tools include large-scale optimization, image processing, ordinary and partial differential equations, the chemical Langevin and Fokker-Planck equations, and the chemical master equation. A central theme of the class is the art of identifying biological problems which require theoretical analysis and choosing the correct mathematical framework with which to solve the problem.

Terms Offered: Winter

Prerequisite(s): Consent of instructor

Equivalent Course(s): ECEV 35400,MGCB 35401

#### STAT 35500. Statistical Genetics. 100 Units.

This is an advanced course in statistical genetics. It is recommended that students have either Human Genetics 47100 or both STAT 24400 and 24500 as prerequisites. This is a discussion course and student presentations will be required. Topics vary and may include, but are not limited to, statistical problems in genetic association mapping, population genetics, microarray analysis, and genetic models for complex traits.

Terms Offered: Spring

Prerequisite(s): HGEN 47100, STAT 24400-24500 or equivalent recommended.

Students without this background should consult instructor.

# STAT 35600. Applied Survival Analysis. 100 Units.

This course will provide an introduction to the principles and methods for the analysis of time-to-event data. This type of data occurs extensively in both observational and experimental biomedical and public health studies, as well as in industrial applications. While some theoretical statistical detail is given (at the level appropriate for a Master's student in statistics), the primary focus will be on data analysis. Problems will be motivated from an epidemiologic and clinical perspective, concentrating on the analysis of cohort data and time-to-event data from controlled clinical trials.

Instructor(s): H. Cao Terms Offered: Autumn

Prerequisite(s): HSTD 32100 or Stat 22000; introductory statistics or consent of

instructor

Equivalent Course(s): HSTD 33100

#### STAT 35700. Epidemiologic Methods. 100 Units.

This course expands on the material presented in "Principles of Epidemiology," further exploring issues in the conduct of epidemiologic studies. The student will learn the application of both stratified and multivariate methods to the analysis of epidemiologic data. The final project will be to write the "specific aims" and "methods" sections of a research proposal on a topic of the student's choice.

Instructor(s): D. Lauderdale, R. Thisted Terms Offered: Winter

Prerequisite(s): HSTD 30700 or HSTD 30900 AND HSTD 32400 or applied statistics courses through multivariate regression.

Equivalent Course(s): HSTD 31001

#### STAT 35800. Statistical Applications. 100 Units.

This course provides a transition between statistical theory and practice. The course will cover statistical applications in medicine, mental health, environmental science, analytical chemistry, and public policy.

,Lectures are oriented around specific examples from a variety of content areas. Opportunities for the class to work on interesting applied problems presented by U of C faculty will be provided. Although an overview

,of relevant statistical theory will be presented, emphasis is on the development of statistical solutions to interesting applied problems.

Instructor(s): R. Gibbons Terms Offered: Spring

Prerequisite(s): HSTD 32700/STAT 22700 or STAT 34700 or consent of instructor.

Equivalent Course(s): HSTD 33500

# STAT 36700. History of Statistics. 100 Units.

This course covers topics in the history of statistics, from the eleventh century to the middle of the twentieth century. We focus on the period from 1650 to 1950, with an emphasis on the mathematical developments in the theory of probability and how they came to be used in the sciences. Our goals are both to quantify uncertainty in observational data and to develop a conceptual framework for scientific theories. This course includes broad views of the development of the subject and closer looks at specific people and investigations, including reanalyses of historical data.

Instructor(s): S. Stigler Terms Offered: Spring

Prerequisite(s): Prior statistics course

Equivalent Course(s): STAT 26700, CHSS 32900, HIPS 25600

# STAT 36900. Applied Longitudinal Data Analysis. 100 Units.

Longitudinal data consist of multiple measures over time on a sample of individuals. This type of data occurs extensively in both observational and experimental biomedical and public health studies, as well as in studies in sociology and applied economics. This course will provide an introduction to the principles and methods for the analysis of longitudinal data. Whereas some supporting statistical theory will be given, emphasis will be on data analysis and interpretation of models for longitudinal data. Problems will be motivated by applications in epidemiology, clinical medicine, health services research, and disease natural history studies.

Instructor(s): R. Thisted Terms Offered: Autumn

Prerequisite(s): HSTD 32400/STAT 22400 or equivalent, and HSTD 32600/STAT 22600 or HSTD 32700/STAT 22700 or equivalent; or consent of instructor.

Equivalent Course(s): HSTD 33300

#### STAT 37400. Nonparametric Inference. 100 Units.

Nonparametric inference is about developing statistical methods and models that make weak assumptions. A typical nonparametric approach estimates a nonlinear function from an infinite dimensional space rather than a linear model from a finite dimensional space. This course gives an introduction to nonparametric inference, with a focus on density estimation, regression, confidence sets, orthogonal functions, random processes, and kernels. The course treats nonparametric methodology and its use, together with theory that explains the statistical properties of the methods.

Terms Offered: Winter

Prerequisite(s): STAT 22400 or 24400 Equivalent Course(s): STAT 27400

# STAT 37500. Pattern Recognition. 100 Units.

This course treats statistical models and methods for pattern recognition and machine learning. Topics include a review of the multivariate normal distribution, graphical models, computational methods for inference in graphical models in particular the EM algorithm for mixture models and HMM's, and the sum-product algorithm. Linear discriminative analysis and other discriminative methods, such as decision trees and SVM's are covered as well.

Terms Offered: Spring

Prerequisite(s): Linear algebra at the level of STAT 24300. Knowledge of probability and statistical estimation techniques (e.g., maximum likelihood and linear regression) at the level of STAT 24400-24500

Equivalent Course(s): STAT 24610

# STAT 37601. Machine Learning and Large-Scale Data Analysis. 100 Units.

This course is an introduction to machine learning and the analysis of large data sets using distributed computation and storage infrastructure. Basic machine learning methodology and relevant statistical theory will be presented in lectures. Homework exercises will give students hands-on experience with the methods on different types of data. Methods include algorithms for clustering, binary classification, and hierarchical Bayesian modeling. Data types include images, archives of scientific articles, online ad clickthrough logs, and public records of the City of Chicago. Programming will be based on Python and R, but previous exposure to these languages is not assumed.

Instructor(s): J. Lafferty Terms Offered: Spring

Prerequisite(s): (STAT 22000 or STAT 23400) and (CMSC 15400 or CMSC 12200), or consent of the instructor

Equivalent Course(s): CMSC 25025

#### STAT 37710. Machine Learning. 100 Units.

This course provides hands-on experience with a range of contemporary machine learning algorithms, as well as an introduction to the theoretical aspects of the subject. Topics covered include: the PAC framework, elements of computational learning theory, the VC dimension, boosting, Bayesian learning, graphical models, clustering, dimensionality reduction, linear classifiers, kernel methods including SVMs, and an introduction to statistical learning theory.

Terms Offered: Spring

Prerequisite(s): CMSC 25400 or consent of instructor

Equivalent Course(s): CMSC 35400

#### STAT 37790. Topics in Statistical Machine Learning. 100 Units.

"Topics in Statistical Machine Learning" is a second graduate level course in machine learning, assuming students have had previous exposure to machine learning and statistical theory. The emphasis of the course is on statistical methodology, learning theory, and algorithms for large-scale, high dimensional data. The selection of topics is influenced by recent research results, and students can take the course in more than one quarter.

Terms Offered: Winter

Prerequisite(s): STAT 37710/CMSC 35400 or consent of instructor

#### STAT 37900. Computer Vision. 100 Units.

This course covers deformable models for detecting objects in images. Topics include one-dimensional models to identify object contours and boundaries; two-dimensional models for image matching; and sparse models for efficient detection of objects in complex scenes. Mathematical tools needed to define the models and associated algorithms are developed. Applications include detecting contours in medical images, matching brains, and detecting faces in images. Neural network implementations of some of the algorithms are presented, and connections to the functions of the biological visual system are discussed.

Instructor(s): Y. Amit

Equivalent Course(s): CMSC 35500,CMSC 25050

#### STAT 38100. Measure-Theoretic Probability I. 100 Units.

This course provides a detailed, rigorous treatment of probability from the point of view of measure theory, as well as existence theorems, integration and expected values, characteristic functions, moment problems, limit laws, Radon-Nikodym derivatives, and conditional probabilities.

Terms Offered: Winter

Prerequisite(s): STAT 31300 or consent of instructor

# STAT 38300. Measure-Theoretic Probability III. 100 Units.

This course continues material covered in STAT 38100, with topics that include Lp spaces, Radon-Nikodym theorem, conditional expectation, and martingale theory. Terms Offered: Spring

Prerequisite(s): STAT 38100

## STAT 38500. Advanced Topics: Probability. 100 Units.

This course will include the following topics: continuous-time martingales, Brownian motion, Levy processes, Ito integral and stochastic calculus, and stochastic differential equations and diffusions. Topics may vary.

Terms Offered: Autumn

Prerequisite(s): STAT 38300 or consent of instructor

Equivalent Course(s): MATH 38509

#### STAT 38600. Topics in Stochastic Processes. 100 Units.

This will be a course in "high-dimensional" probability aimed at introducing some of the mathematics of empirical processes, concentration, Gaussian random fields, large random matrices, and compressed sensing.

Prerequisite(s): Basic probability and analysis, discrete-time martingales (STAT 30400 and 31300)

# STAT 38650. Random Matrices and Related Topics. 100 Units.

This course will be an introduction to the spectral theory of large random matrices and related topics in probability. The first part of the course will be devoted to \bulk spectral properties of Wigner and sample covariance matrices (that is, the empirical distribution of their eigenvalues), leading to the Wigner semi-circle law and the Marchenko-Pastur theorem. The second part will focus on the Gaussian orthogonal and unitary ensembles and on the distribution theory of the top eigenvalue (Tracy-Widom theory). This will lead to the study of orthogonal polynomials, Fredholm determinants, determinantal point processes, and Toeplitz matrices. Relationships to various combinatorial problems in probability, including asymmetric exclusion processes, last-passage percolation, and various stochastic models of growth and deposition, will be studied. Several other related topics may be discussed, depending on the interests and backgrounds of the audience and the instructor. Note(s): Not offered in 2013-14

#### STAT 39000. Stochastic Calculus, 100 Units.

The course starts with a quick introduction to martingales in discrete time, and then Brownian motion and the Ito integral are defined carefully. The main tools of stochastic calculus (Ito's formula, Feynman-Kac formula, Girsanov theorem, etc.) are developed. The treatment includes discussions of simulation and the relationship with partial differential equations. Some applications are given to option pricing, but much more on this is done in other courses. The course ends with an introduction to jump process (Levy processes) and the corresponding integration theory.

Instructor(s): G. Lawler Terms Offered: Winter

Equivalent Course(s): FINM 34500

#### STAT 39800. Field Research. Variable Units.

This Summer Quarter course offers graduate students in the Statistics Department the opportunity to apply statistics knowledge that they have acquired to a real industry or business situation. During the summer quarter in which they are registered for the course, students complete a paid or unpaid internship of at least six weeks. Prior to the start of the work experience, students secure faculty consent for an independent study project to be completed during the internship quarter.

Terms Offered: Summer only Prerequisite(s): Consent of instructor and faculty advisor

#### STAT 39900. Master's Seminar. Variable Units.

This course is for Statistics Master's students to carry out directed reading or guided work on topics related to their Master's papers.

#### STAT 40100. Reading/Research: Statistics. Variable Units.

This course allows doctoral students to receive credit for advanced work related to their dissertation topics. Students register for one of the listed faculty sections with prior consent from the respective instructor. Students may work with faculty from other departments; however, they still must obtain permission from and register with one of the listed faculty members in the Department of Statistics.

Terms Offered: All quarters

Prerequisite(s): Consent of instructor

# STAT 42500. Theoretical Neuroscience: Dynamics of Neurons and Networks. 100 Units.

This course will introduce students to basic models of neurons and neural networks. It will cover basic mathematical tools that are useful to analyze such models. The course will start by models of single neurons and synapses. It will then move to network models, and describe how external inputs, single neuron and synaptic dynamics shape the collective dynamics at the network level in various types of network architectures. The last part of the course will focus on how learning shapes the dynamics at the neuron and network levels.

Prerequisite(s): Consent of instructor

Note(s): In 2013-14, the material will be offered as a two-course sequence: 42510 Theoretical Neuroscience: Single Neuron Dynamics and Computation (in Autumn), followed by 42520 Theoretical Neuroscience: Network Dynamics and Computation (in Winter).

Equivalent Course(s): CPNS 35500

# STAT 42600. Theoretical Neuroscience: Statistics and Information Theory. 100 Units.

This course will introduce students to basic models of neurons and neural networks. It will cover basic mathematical tools that are useful to analyze such models. The course will start by models of single neurons and synapses. It will then move to network models, and describe how external inputs, single neuron and synaptic dynamics shape the collective dynamics at the network level in various types of network architectures. The last part of the course will focus on how learning shapes the dynamics at the neuron and network levels.

Terms Offered: Spring. Prerequisite(s): CPNS 35500

Equivalent Course(s): CPNS 35600

## STAT 45800. Workshop on Collaborative Research in Statistics, Computing, and Science. 100 Units.

This course aims to bring together researchers with expertise in a variety of disciplines (statistics, computing, biology) to work together to produce solutions to a particular scientific problem. The problem we will focus on is identifying differences in the results of a high-throughput sequencing assay between groups of samples. No knowledge of this problem is assumed: it will be introduced in full at the start of the class, together with an outline for an initial proposed approach to addressing the problem. We will work together to implement, test, document and improve this proposed approach. It is expected that each student will bring one or more relevant skills to the table (see list below), as well as an enthusiasm to learn new relevant skills. An ambitious goal is that by the end of the class we will have functional and well-documented software implementing methods that work for the problem in hand. A less ambitious goal is that we will have learned something about the benefits and challenges of working together with people with different skill sets, as well as being exposed to an important type of data (high-throughput sequencing) that is likely to play a major role in biological sciences during the next decade.

Questions to the instructor: Matthew Stephens, mstephens@uchicago.edu

Here's a nonexhaustive list of relevant skills. It is expected that each student will have expertise in one or more of these, and enthusiasm to learn others (from each other!).

Statistics:

Wavelets

Generalized linear (mixed) models

Shrinkage

Hierarchical models

Bayesian methods

Statistical Computing:

R programming

R package writing

R vignettes interfacing R with C++

Computing:

scripting languages (e.g., Perl, Python)

C++

Version control and software sharing (git)

Other software engineering practices I may not know about!

Bioinformatics:

Tools for dealing with high-throughput sequence data

BAM file, SAM files etc

Biological Assays:

DNase-seq

ChIP-seq

RNA-seg

Terms Offered: Winter



## THE DIVISION OF THE SOCIAL SCIENCES

#### Dean

- Mario L. Small
   Deputy Dean and Master of the Collegiate Division
- Dean of Students
- Patrick Hall
   Associate Deans of Students
- Don Dunbar

· Adam Green

• Kelly Therese Pollock

The Division of the Social Sciences includes the departments, committees and programs which are engaged particularly in the study of human beings in social and temporal contexts; the origins, development, and structure of institutions and ideas, and the relationships between individuals and among groups of individuals. Research and instruction, which are strongly interdisciplinary, focus on interpreting the complexity of human experience through time and explore the interactions between diverse peoples and the world in which they live.

The division welcomes as students potential researchers, scholars, and teachers, as well as those who seek in the social sciences the enrichment of their cultural preparation for the appreciation of life. The division awards the degrees of Master of Arts and Doctor of Philosophy. The division also cooperates in the undergraduate programs leading to the degree of Bachelor of Arts awarded by the College. Students seeking the Bachelor of Arts degree should consult the College's publication, *Courses and Programs of Study*.

Programs leading to the Ph.D. are offered by the Departments of Anthropology, Comparative Human Development, Economics, History, Political Science, Psychology, and Sociology, as well as the John U. Nef Committee on Social Thought, and also, the Committee on the Conceptual and Historical Studies of Science. Programs leading to the M.A. are offered by the Committee on International Relations, the Center for Latin American and Caribbean Studies, the Center for Middle Eastern Studies, and the Master of Arts Program in the Social Sciences (MAPSS).

#### ADMISSION TO THE DIVISION

The Division of the Social Sciences considers for admission to its graduate programs students who have a minimum of a bachelor's degree from an accredited college, or equivalent training. Students apply for admission to the division through the Office of the Dean of Students in the Division of the Social Sciences; applications are subsequently evaluated by the faculties of the various programs. Applications

can be found at https://socialsciences.uchicago.edu/admissions/apply. Questions should be directed to admissions@ssd.uchicago.edu.

#### **DEGREES**

#### MASTER OF ARTS

The degree is awarded for competence in a field of study, not solely for satisfactory completion of a set number of courses.

The general requirements for the master's degree are as follows:

- In programs that recommend only the awarding of the master's degree, at least nine courses and three quarters of residence in the division. In departments and committees that recommend the awarding of the Ph.D. degree, at least three full time quarters (or their part time equivalent) of Scholastic Residence.
- Completion of the program of study and other requirements prescribed by the student's department or committee.
- In almost all departments and committees, presentation of an acceptable master's research paper or thesis.
- 4. In certain departments and committees, satisfactory performance on a final comprehensive examination.
- 5. Any additional requirements set by the separate departments or committees.

#### DOCTOR OF PHILOSOPHY

The degree of Doctor of Philosophy is awarded for mastery of subject matter and demonstration of research capacity, not solely for completion of a set number of requirements.

The general requirements for the Doctor of Philosophy degree are:

- Residence requirement and program requirements. Students in all Ph.D. degree programs must be registered in accordance with the University Doctoral Residence System.
  - Students must complete the requirements set by their particular academic programs (including courses, seminars, research work, and examinations). These requirements vary from program to program within the division.
  - Portions of the program requirements may sometimes be satisfied on the basis of equivalent work done at other institutions or in other units of the University. The student's department or committee determines whether previously earned academic credit and degrees will be accepted as partial fulfillment of program requirements.
- 2. Admission to candidacy at least eight months before the date the degree is to be conferred. The student is admitted to candidacy by the dean of students upon the recommendation of the student's department or committee after completion of the following requirements:
  - A. Completion of the work required for a master's degree even if the formal M.A. degree is not taken.

- B. Successful performance on the departmental preliminary examination(s), if required. Ordinarily, this is taken after the completion of the first year of work.
- C. Approval by the department or committee of a dissertation proposal and a program of research.
- D. Satisfactory completion of any additional requirements set by the separate departments or committees.
- 3. Doctoral dissertation. The candidate is expected to submit to the department or committee an acceptable doctoral dissertation which makes an original contribution to knowledge within the field of inquiry. This step is necessary before the final oral examination is scheduled.
- 4. The final oral examination and defense of the dissertation.



## MASTER OF ARTS PROGRAM IN THE SOCIAL SCIENCES

#### **Executive Committee**

- Ralph A. Austen (Emeritus), History
- Dipesh Chakrabarty, South Asian Languages and Civilization, History
- Elisabeth Clemens, Sociology
- Michael P. Conzen, Geographical Studies
- Chad Cyrenne (Ex officio), Social Sciences
- Jane Dailey, History
- Judith B. Farquhar, Anthropology
- Raymond D. Fogelson (Emeritus), Anthropology, Comparative Human Development
- Morris Fred (Ex officio), Social Sciences
- Rachel Fulton-Brown, History
- Susan Goldin Meadow, Psychology, Comparative Human Development
- Ramón Gutiérrez, History
- Gary Herrigel, Political Science
- Alan L. Kolata, Anthropology
- John J. MacAloon (Ex officio), Social Sciences
- Martha K. McClintock, Psychology, Comparative Human Development
- Omar McRoberts, Sociology
- Howard Nusbaum, Psychology, Computational Neuroscience
- Nathan Tarcov, Political Science, Social Thought
- Richard P. Taub, Sociology, Human Development Earl S. Johnson Instructor
- Darcy Heuring, History

#### GENERAL INFORMATION

The Master of Arts Program in the Social Sciences (MAPSS) is a one year program of graduate studies leading to the A.M. (Masters of Arts) degree. MAPSS offers a wide variety of disciplinary and interdisciplinary opportunities for advancing academic or career goals, while allowing flexibility unusual among graduate programs. MAPSS makes the resources of a great university available for student-centered and highly individualized programs of graduate study. Each student works closely with the director and an assigned preceptor on all aspects of the program, from designing a customized curriculum, to defining the area of scholarly research, to writing the master's paper. MAPSS provides every student with a vibrant and collaborative intellectual community and core course training in social science theory and methodology. Students choose seven additional courses from the full range of regular doctoral and graduate professional offerings of the departments

and committees of the Division of the Social Sciences and of the other divisions and professional schools of the University. A dual A.M./M.A. degree with the University of Chicago Harris School of Public Policy is also available.

The program is well suited for those who wish either to take advantage of the resources of several disciplines to study a problem or area of interest, or to strengthen their training and achievement in a single discipline. Some MAPSS students acquire skills and knowledge for careers that make use of the social sciences; others prepare for further graduate work or professional training. The program further provides students an opportunity to explore fields in the social sciences in which they may have little background before making a major professional or educational commitment.

MAPSS offers sophisticated counseling and application support to students who confirm their vocations for doctoral or professional school study. MAPSS graduates have received and presently pursue doctorates in all of Chicago's social science departments and committees, as well as Ph.D., J.D., and M.D. degrees in the various professional schools. They are likewise welcomed into advanced study at other major research institutions in the U.S. And abroad.

Graduates of the program also enter or return to a wide range of careers for which the A.M. is increasingly the entry level degree. Such careers include community organizing, contract research, business consulting, teaching, counseling, publishing, health care, government service, public affairs, nonprofit administration, arts and museum curation. A national network of MAPSS alumni, in concert with the University's office of Career Counseling and Placement Services, enthusiastically assists current students in identifying career possibilities and securing challenging positions.

#### Preceptors

Students work closely with one of the preceptors in the Master of Arts Program in the Social Sciences. Preceptors guide students in defining their areas of academic specialization as well as in choosing courses. Preceptors also assist students in selecting faculty sponsors for their A.M. papers and take an active role in guiding and evaluating the research and writing of these papers.

#### Program Requirements and Course Work

Students in the Master of Arts Program in the Social Sciences are expected to complete nine graduate level courses with a minimum grade average of B, and a master's paper that must be approved by both a faculty sponsor and a MAPSS preceptor.

#### COURSE WORK

The nine courses must include the core course and meet the methods requirement, as described below. The core course, Perspectives in Social Science Analysis, provides a critical understanding of the major theoretical approaches used by professional social scientists. It supplies all MAPSS students with a common technical vocabulary and evens out their foundational preparations across the

various disciplines. Because Perspectives is offered only in the Autumn Quarter, students may not begin the MAPSS program in any other quarter.

Students must also fulfill a social sciences methods requirement. MAPSS offers courses in historical, ethnographic and political theory methods. Survey research methods courses are sponsored by the Division of Social Sciences. Dozens of other methods courses from statistics and policy methods to interview and case study methods are available to fulfill the requirement in any given year. Students may also fulfill the requirement by demonstrating prior methods course work.

Courses are selected with the guidance and approval of a MAPSS preceptor and the MAPSS director. The full time graduate student registers for three courses each quarter, and completes the nine course requirement in three quarters.

#### THE MASTER'S PAPER

Students write the paper under the supervision of a regular faculty member in the University and a preceptor, both of whom provide a written evaluation and a letter grade upon its completion. The Master's paper may be based upon: empirical research testing a social science hypothesis or deploying a specified social science perspective; a theoretical critique of existing social science literature on a selected topic; systematic survey or evaluation research; or any other topic acceptable to the faculty sponsor, the preceptor, and the program director. During the winter quarter, preceptors hold regular thesis proposal writing workshops. Any faculty member from any school, division, or department of the University may serve as the thesis paper sponsor. In any two academic years, as many as 240 individual faculty members supervise MAPSS papers.

A selection of M.A. paper titles may further suggest the range of research interests accommodated within the MAPSS program.

"Democratic Leadership in Athens and its Role in Thucydides Political Thought."

"Holocaust Representation and Memory: The United States Holocaust"

"Memorial Museum, Washington, D.C. And the Belt Hashoah Museum of Tolerance, Los Angeles."

"The Cloning Debate: A Cultural Psychology of Morality."

"Joint Attention, Attention, and Word Learning."

"Queer Nation and the Use of Culture and Symbolism in Contemporary Social Movements."

"Mothers of Capital: the Intersection of Globalization, Naturalization, and Indian Immigrants in Chicago's South Asian Diaspora."

"Learning to Listen: An Investigation into Variables that Augment Perceptual Learning."

"The Gift Horse: International Post Disaster Aid Reconstruction and its Hidden Consequences."

"Everyday Work: The Moral Economy of a Bosnian Black Market."

"Post Philosophical Politics in a Literary Culture: A Critique of Richard Rorty's Twenty first Century Narrative."

"Multinationals, Labor, and the Chinese State: A Comparative Case Study of Motorola and McDonald's in China."

"Sacred Travel Sites in Cyberspace."

"Resolving Trauma Through the Truth and Reconciliation Commission."

"What Does Neuroscience Reveal About the Phenomenon of Freud's Compulsion to Repeat?"

"Chinese and Creole, an Identity in Transition: The Chinese community and Associations in Jamaica, West Indies."

"To Make Georgia Howl: Just War Theory and the Strategy and Tactics of William Tecumseh Sherman, 1861 65."

"Toward the Eradication of the Trafficking of Women: Rectifying Rights and Rescue in Theory and Practice."

"Beyond the Pale of Sovereignty: the Problem of Indigenousness as the Basis of Citizenship in the Post Colonial African State."

"Truman, MacArthur and the Untold Story: 1949 1951."

"Vertebral Wedging of the Lumbar Vertebrae in Primates: Possible Evolutionary Implications for Bipedal Locomotion."

"The Application of UN Refugee Policy: A Case Study of Tanzanian Refugee Policy toward Burundian Refugees from 1993 2002."

"Labor Unions in a Global Economy: Changes, Challenges, and Opportunities."

"Psychological Distress and its Relation to Ethnic Identity among Korean American Youth in Chicago."

"British Public Opinion and Open Diplomacy During the Greek War of Independence, 1821 1829."

"The Public Housing Reform Act of 1998: A Case Study in the Creation of Public Policy in America."

"Mourning, Memory and Memorialisation: Gender and First World War Commemoration in Britain and France, 1918 1929."

"Lost Souls the Persistence of Traditional Belief in Haitian Immigrants Perceptions of Mental Illness."

"The Political Economy of Finance and Corporate Reform in East Asia."

"American Indian Powwows in the 21st Century: Creating Cultural and Ethnic Identity and Community through Dance."

#### **ADMISSION**

Applicants for the Master of Arts Program in the Social Sciences are expected to meet the graduate admissions requirements of the division. Submission of Graduate Record Examination (GRE) scores is required. Applicants from non-English speaking countries must provide evidence of English proficiency by submitting scores from either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS).

MAPSS is designed to be completed in one academic year (three or four quarters on a full time basis). All financial aid is merit based, and the MAPSS program offers partial tuition scholarships on a highly competitive basis. Persons with flexible daytime schedules may make part time arrangements, but such students will not be eligible for financial aid.

#### HOW TO APPLY

The application process for admission and financial aid for all Social Sciences graduate programs is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online at: https://applyssd.uchicago.edu/apply/. Most required supplemental material can be uploaded into the application.

Questions pertaining to admissions and aid should be directed to admissions@ssd.uchicago.edu or (773) 702-8415. All correspondence and required materials that cannot be uploaded should be mailed to:

The University of Chicago Division of the Social Sciences Admissions Office, Foster 105 1130 East 59th Street Chicago, IL 60637

For additional information about the program, contact the MAPSS departmental office at: 773-702-8316, visit the MAPSS webpage at: http://mapss.uchicago.edu/ or send an e -mail to mapss@uchicago.edu.

You may also contact E.G. Enbar, Student Affairs Administrator at: 773-702-8312 or egenbar@uchicago.edu.



# MASTER OF ARTS IN LATIN AMERICAN STUDIES - SOCIAL SCIENCES

#### Director

#### • Mauricio Tenorio

Please see entry for Center for Latin American Studies for the list of the Latin American Studies faculty committee, also available at http://clas.uchicago.edu/.

The Center for Latin American Studies administers a Master of Arts degree program in Latin American Studies. The Master of Arts program is a one year program of graduate studies that provides students with a thorough knowledge of the cultures, history, politics, and languages of the region. Students benefit from various resources that put the University of Chicago at the forefront of research and scholarship on Latin America, including world renowned faculty, top quality library resources, graduate workshops, and field research grant opportunities. Please see the Center for Latin American Studies entry in the Graduate Announcements for full details on Center resources. The Center also administers a Bachelor of Arts (major and minor) in Latin American Studies (for details please see http://clas.uchicago.edu/programs/).

The master's program attracts students who will benefit from interdisciplinary training in a highly individualized and flexible program. Each student works closely with faculty and the program advisor to design a customized curriculum, define an area of scholarly research, and write a master's paper. Students take advantage of the program's flexibility to advance their academic and/or career objectives before making a major professional or educational commitment. Some students approach a research interest from a multidisciplinary perspective. Others strengthen their training in a single discipline as it relates to Latin American Studies, or explore new fields.

Through the M.A. Proseminar, the required common core of the master's program, students gain a critical understanding of the major theoretical approaches, principal research methods, and current trends in Latin American Studies. During the winter quarter of the Proseminar students develop the proposal for their master's paper. The master's paper is meant to demonstrate the student's ability to apply formal training in Latin American Studies toward a specific and original research problem. Primary Latin Americanist faculty at the University of Chicago serve as guest lecturers in the Proseminar to introduce students to their research.

The master's program provides students with the opportunity to develop and enhance skills and knowledge appropriate for careers related to Latin America or as preparation for further graduate work or professional training. Graduates of the program enter or return to careers for which the master's degree is increasingly an entry-level requirement, including secondary and higher education, government, business, and various cultural organizations and non-profit agencies. Others enter

doctoral and professional degree programs with support and advice from Latin American Studies staff and faculty.

#### ADMISSION TO THE MASTER'S PROGRAM

Prospective students to the Master of Arts program in Latin American Studies may apply to the program through the Division of the Social Sciences or through the Division of the Humanities and will receive the degree from the division through which they have been admitted.

#### Information on How to Apply

The application process for admission and financial aid for all graduate programs in Humanities is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online at: http://humanities.uchicago.edu/prospective/admissions.html.

Questions pertaining to admissions and aid should be directed to humanitiesadmissions@uchicago.edu or (773) 702-1552.

The application process for admission and financial aid for all graduate programs in Social Sciences is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online at: http://applyssd.uchicago.edu/apply/

Questions pertaining to admissions and aid through Social Sciences should be directed to admissions@ssd.uchicago.edu or (773) 702-8415. Most of the documents needed for the application can be uploaded through the online application. Any additional correspondence and materials sent in support of applications should be mailed to:

The University of Chicago Division of the Social Sciences Admissions Office, Foster 105 1130 East 59th Street

Foreign students must provide evidence of English proficiency by submitting scores from either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS). Current minimum scores, etc., are provided with the application.

Students who wish to earn a Ph.D. degree should apply to a degree program in one of the graduate departments or committees in the Division of the Humanities or the Division of the Social Sciences. Foreign students should be advised that in the United States completion of a master's degree program is generally not a prerequisite to entering a Ph.D. program.

#### PROGRAM REQUIREMENTS

Upon entering the program, students will work under academic direction of the CLAS Associate Director to develop a specific program of study, cultivate their

research interests, and identify a faculty advisor for their master's paper. The basic components of the master's program are described below.

#### LANGUAGES

A fundamental requirement of the program is proficiency in one of the spoken languages (other than English) of Latin America and the Caribbean. This requirement normally will be met in Spanish or Portuguese. However, substitution of an Amerindian language (such as Aymara, K'iche' Maya, or Yucatec Maya) or a language spoken in the Caribbean (such as Hatian Creole) is permissible with the approval of the program advisor. Petitions for substitution will be evaluated in light of the student's prior competency and curricular program and the adequacy of instructional resources in the substitute language. Advanced Proficiency Examinations will be administered to evaluate the entering student's language skills. Students usually meet the language requirement through the Advanced Proficiency Examination in Spanish or Portuguese.

#### COURSE REQUIREMENTS

The standard course requirement is nine quarter courses, to be met as follows: the M.A. Proseminar in Latin American Studies; five courses in Latin American and Caribbean Studies; and three elective courses. Students are expected to fulfill the language requirement through proficiency examination, and complete the master's program in three quarters of course work. In consultation with the program advisor, the student will select three elective courses suited to individual curricular interests. These courses may be selected from the offerings in the divisions and professional schools of the University. Non degree graduate level courses at the University completed prior to admission to the master's program may be used in fulfillment of elective requirements, upon approval of the program advisor.

Credits towards the Master of Arts in Latin American Studies must be taken at the graduate level (courses designated as 30000 or above). However, certain lower level courses may be accepted, at the discretion of the program advisor. All course requirements can be met in three academic quarters.

#### THE MASTER'S PAPER

In addition to the course requirements outlined above, every master's degree candidate is required to submit a master's paper. This paper is meant to demonstrate the student's ability to apply formal training in Latin American and Caribbean studies toward a specific research problem developed over the course of the program. The research and writing of this paper will be conducted under the guidance of a faculty advisor. A student may register for the course LACS 40300 Master's Paper Preparation, which is arranged on an individual basis with the faculty advisor for the project. This course, while optional, may be counted as one of the five required Latin American Studies core courses.

#### **COURSES**

Courses pertinent to the Latin American area are offered through the individual departments and committees of the Divisions of the Social Sciences and the

Humanities, and through the University's professional schools. Please refer to the listings in these Announcements and in the quarterly Time Schedules for specific offerings. Additionally, special courses are offered by senior visiting Latin Americanist faculty through the Center's Tinker Visiting Professorship. Each quarter the Center compiles a comprehensive list of Latin American and Caribbean courses to be offered at the University available at http://maclas.uchicago.edu/page/courses

For additional information about the Master of Arts in Latin American Studies program, please see http://maclas.uchicago.edu/ or call (773) 702-8420.

#### LATIN AMERICAN & CARIBBEAN STUDIES COURSES

## LACS 30401. Intensive Study of a Culture: Lowland Maya History and Ethnography. 100 Units.

The survey encompasses the dynamics of first contact; long-term cultural accommodations achieved during colonial rule; disruptions introduced by state and market forces during the early postcolonial period; the status of indigenous communities in the twentieth century; and new social, economic, and political challenges being faced by the contemporary peoples of the area. We stress a variety of traditional theoretical concerns of the broader Mesoamerican region stressed (e.g., the validity of reconstructive ethnography; theories of agrarian community structure; religious revitalization movements; the constitution of such identity categories as indigenous, Mayan, and Yucatecan). In this respect, the course can serve as a general introduction to the anthropology of the region. The relevance of these area patterns for general anthropological debates about the nature of culture, history, identity, and social change are considered.

Instructor(s): J. Lucy Terms Offered: Autumn

Note(s): Not offered 2013-14

#### LACS 30603. Image and Text in Mexican Codices. 100 Units.

,In most Mesoamerican languages, a single word describes the activities that we would call "writing" and "painting." This seminar will investigate the interrelationships between image and text in Central Mexico both before and immediately after the introduction of alphabetic writing in the 16th century. We will also review art historical and archaeological evidence for the social conditions of textual and artistic production in Mexico, and how these traditions were transformed under Spanish colonial rule. We will consider the materiality of text and image by working with facsimiles of Mesoamerican books in the Special Collections of the Regenstein Library. At the end of the course, students will have acquired a basic literacy in Aztec and Mixtec writing systems, and will have refined their ability to look productively and write elegantly about art.

Instructor(s): C. Brittenham Terms Offered: Spring

Equivalent Course(s): ARTH 20603, ARTH 30603, LACS 20603

#### LACS 31700. Slavery and Unfree Labor. 100 Units.

This course offers a concise overview of institutions of dependency, servitude, and coerced labor in Europe and Africa, from Roman times to the onset of the Atlantic slave trade, and compares their further development (or decline) in the context of the emergence of New World plantation economies based on racial slavery. We discuss the role of several forms of unfreedom and coerced labor in the making of the "modern world" and reflect on the manner in which ideologies and practices associated with the idea of a free labor market supersede, or merely mask, relations of exploitation and restricted choice.

Instructor(s): S. Palmié Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 22205, ANTH 31700, CRES 22205, LACS 22205

## LACS 31900. ¿Cuerpos Desechables? Estéticas de la No-Vida en las Literaturas Hispanoamericanas (de la Conquista al siglo XXI) 100 Units.

In this seminar we will conduct a theoretical exploration of the aesthetic procedures through which human life has been represented as expendable in Spanish-American literature from the Conquest to the twenty-first century, as well as an examination of the historical and philosophical contexts within which such figurations emerged. The course will focus on case studies that correspond to four key moments in the history of the region: conquest and colonization, slavery and the formation of national states in the nineteenth century, the triumph of a capitalist export economy at the turn of the twentieth, and the violent challenges posed by globalization and narcotráfico in the contemporary context. Among the issues and texts we may engage are Fray Bartolomé de las Casas and Francisco de Vitoria's sixteenth-century dispute on the right of conquest and the *Brevísima relación de la destrucción de las Indias*, Esteban Echevarría's *El matadero*, Lucio Mansilla's *Una excursión a los indios ranqueles*, Juan F. Manzano's *Autobiografía de un esclavo*, Manuel Zeno Gandía's *La charca*, and Fernando Vallejo's *La virgen de los sicarios*.

Instructor(s): A. Lugo-Ortiz Terms Offered: Spring

#### LACS 32501-32502-32503. Elementary Haitian Kreyol I-II-III.

This 3 course sequence will provide students with an in-depth study of the Haitian Kreyol language in its modern context, with emphasis on developing students' proficiency in speaking and writing, and in listening and reading comprehension. The course will also provide necessary cultural and historical context.

#### LACS 32501. Elementary Haitian Kreyol I. 100 Units.

Instructor(s): Lecturer Terms Offered: Autumn

Equivalent Course(s): LACS 22501

#### LACS 32502. Elementary Haitian Kreyol II. 100 Units.

Terms Offered: Winter

Equivalent Course(s): LACS 22502

#### LACS 32503. Elementary Haitian Kreyol III. 100 Units.

Terms Offered: Spring

Equivalent Course(s): LACS 22503

#### LACS 32502. Elementary Haitian Kreyol II. 100 Units.

Terms Offered: Winter

Equivalent Course(s): LACS 22502

#### LACS 32503. Elementary Haitian Kreyol III. 100 Units.

Terms Offered: Spring

Equivalent Course(s): LACS 22503

#### LACS 34130. The Production of the Artist. 100 Units.

This course will develop a conversation about what constitutes the image of the contemporary artist. Written exercises will contribute to the development of the problem of how one produces oneself as an artist. The history of dematerialization in art practice from the 1960's, and the discussion of globalization that emerged in the 1980's will be brought to bear. How is the role and identity of the artist constructed in relation to various histories and to the prevailing movements of the moment such as institutional critique and relational aesthetics? This course is open to students of all disciplines who are interested in how the artist is constructed, not only as role or identity, but as a production site.

Instructor(s): R. Basbaum Terms Offered: Autumn

Equivalent Course(s): ARTV 34130, LACS 24130, ARTV 24130

#### LACS 34512-34513-34514. Intermediate Haitian Kreyol I-II-III.

This 3 course sequence will enhance students' understanding of Haitian Kreyol with continued study of the language in its modern context, with emphasis on developing students' proficiency in speaking, writing, listening, and reading comprehension at an intermediate level.

#### LACS 34512. Intermediate Haitian Kreyol I. 100 Units.

Terms Offered: Autumn

Equivalent Course(s): LACS 24512

#### LACS 34513. Intermediate Haitian Kreyol II. 100 Units.

Terms Offered: Winter

Equivalent Course(s): LACS 24513

#### LACS 34514. Intermediate Haitian Kreyol III. 100 Units.

Terms Offered: Spring

Equivalent Course(s): LACS 24514

#### LACS 34513. Intermediate Haitian Kreyol II. 100 Units.

Terms Offered: Winter

Equivalent Course(s): LACS 24513

#### LACS 34514. Intermediate Haitian Kreyol III. 100 Units.

Terms Offered: Spring

Equivalent Course(s): LACS 24514

#### LACS 34600-34700-34800. Introduction to Latin American Civilization I-II-III.

Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies. This sequence is offered every year. This course introduces the history and cultures of Latin America (e.g., Mexico, Central and South America, and the Caribbean Islands).

#### LACS 34600. Introduction to Latin American Civilization I. 100 Units.

Autumn Quarter examines the origins of civilizations in Latin America with a focus on the political, social, and cultural features of the major pre-Columbian civilizations of the Maya, Inca, and Aztec. The quarter concludes with an analysis of the Spanish and Portuguese conquest, and the construction of colonial societies in Latin America.

Terms Offered: Autumn

Equivalent Course(s): LACS 16100, ANTH 23101, CRES 16101, HIST 36101, SOSC 26100

#### LACS 34700. Introduction to Latin American Civilization II. 100 Units.

Winter Quarter addresses the evolution of colonial societies, the wars of independence, and the emergence of Latin American nation-states in the changing international context of the nineteenth century.

Terms Offered: Winter

Equivalent Course(s): ANTH 23102, CRES 16102, HIST 16102, HIST 36102, LACS 16200, SOSC 26200

#### LACS 34800. Introduction to Latin American Civilization III. 100 Units.

Spring Quarter focuses on the twentieth century, with special emphasis on the challenges of economic, political, and social development in the region.

Terms Offered: Spring

Equivalent Course(s): ANTH 23103,CRES 16103,HIST 16103,HIST 36103,LACS 16300,SOSC 26300

#### LACS 34700. Introduction to Latin American Civilization II. 100 Units.

Winter Quarter addresses the evolution of colonial societies, the wars of independence, and the emergence of Latin American nation-states in the changing international context of the nineteenth century.

Terms Offered: Winter

Equivalent Course(s): ANTH 23102, CRES 16102, HIST 16102, HIST 36102, LACS 16200, SOSC 26200

#### LACS 34800. Introduction to Latin American Civilization III. 100 Units.

Spring Quarter focuses on the twentieth century, with special emphasis on the challenges of economic, political, and social development in the region.

Terms Offered: Spring

Equivalent Course(s): ANTH 23103,CRES 16103,HIST 16103,HIST 36103,LACS 16300,SOSC 26300

#### LACS 35011. Africa, America. 100 Units.

This seminar explores the dynamic exchanges in the expressive cultures of Africa and the Americas. It examines a range of visual and material traditions that emerged and grew from the sustained contact between the two continents from the era of the Atlantic Slave Trade to the present. Class discussion, readings, assignments, and museum visits address topics such as carnival performances, santería and candomblé traditions, Vodou ritual forms, Luso-African architecture on both continents, and contemporary art.

Instructor(s): C. Fromont Terms Offered: Winter

Equivalent Course(s): ARTH 25011, ARTH 35011, LACS 25011

#### LACS 36201. Race, Ethnicity and Politics in Comparative Perspective. 100 Units.

The primary objective of this course is to offer a comparative approach to understanding the relationship between race, inequality, and politics. It focuses primarily on examples from Latin America and the United States, and is organized in three sections. In the first, we explore the relationship between capitalist expansion, the modern-nation, state and the socio-historical construction of "race". In the second section, we explore differences in political elites' approaches to the question of race in the period of nation building. We discuss how different ethnoracial groups were incorporated into, or excluded from, the nation both through legal institutions and nationalist ideologies. In the final section, we analyze the emergence of black and indigenous social movements as a critical response to the failure of the nationalist project. Throughout the course we analyze the different ways race, ethnicity, and identity are understood in these distinct contexts, and also explore how race intersects with other axes of power, such as class and gender. (C) Instructor(s): T. Paschel Terms Offered: Autumn

Equivalent Course(s): PLSC 36201

#### LACS 36304. Literature and Society in Brazil. 100 Units.

This course surveys the relations between literature and society in Brazil, with an emphasis on the institution of the novel in the nineteenth and early twentieth centuries. The nineteenth-century Brazilian novel, like the Russian novel, was an arena in which intellectuals debated, publicized, and perhaps even discovered social questions. We will examine ways in which fiction has been used and misused as a historical document of slavery and the rise of capitalism, of race relations, of patronage and autonomy, and of marriage, sex, and love. We will read works in translation by Manuel Antonio de Almeida, Jose de Alencar, Machado de Assis, Aluisio de Azevedo, and others.

Instructor(s): D. Borges Terms Offered: Spring

Equivalent Course(s): LACS 26304, HIST 36304, HIST 26304

#### LACS 36602. Brazilian Literature and Cinema. 100 Units.

In this class, we will discuss the intricate and complex relationship between literature and film in Brazilian culture. Should film adaptations be faithful to the novels by which they were inspired? Should such films be regarded as interpretations of the original text or should they be evaluated as an autonomous cultural production? What role do they play in the process of canonization of a literary work? Those are questions that we will try to answer throughout the quarter.

Instructor(s): A. Melo Terms Offered: Autumn

Note(s): All the books will be available in English. Taught in English with an additional weekly session in Portuguese for students seeking Portuguese credit. Equivalent Course(s): PORT 36502,LACS 26602,PORT 26502

#### LACS 36802. Bunuel and Surrealism. 100 Units.

Description forthcoming.

Instructor(s): Jim Lastra Terms Offered: Winter

Equivalent Course(s): CMST 26802, LACS 26802, CMST 36802

#### LACS 37004. Lusophone Postcolonial Studies. 100 Units.

The main goal of this seminar is to discuss the specificities and predicaments of Lusophone Postcolonial Studies. In what sense can Portuguese colonialism be compared to its British and French counterparts? What was the role played by Brazil in the relation between Portugal and Lusophone Africa? (Did Brazil represent a model to be followed by African anti-colonial intellectuals in their search for political and cultural independence? Or was Brazil complicit with Portuguese colonialism?) How should we account for this kind of South-South relationship between Brazil and Lusophone African countries? These are the questions we will address in this seminar.

Instructor(s): A. Melo Terms Offered: Autumn

Note(s): Taught in English with an additional weekly session in Portuguese for students seeking Portuguese credit.

Equivalent Course(s): PORT 37000, LACS 27004, PORT 27000

#### LACS 39503. Mexican Murals. 100 Units.

This course examines three vital moments of mural production in Mexico: ancient, colonial, and modern. We will begin by looking at indigenous Mesoamerican wall painting traditions of Teotihuacan, the Maya, Cacaxtla, and the Aztecs, and then consider how these traditions were transformed by the encounter with Spanish colonialism to provide decoration for the walls of monastic churches. Finally, we will examine the modern Mexican muralist movement, looking at the work of Diego Rivera, José Clemente Orozco, David Alfaro Siqueiros, and others, with a particular focus on Rivera's murals at the Detroit Institute of Arts. Throughout the course, we will consider mural paintings in relationship to architecture and other media, paying special attention to the different methodologies and kinds of evidence that have been used to interpret these works. The course will also focus on developing research, writing, and presentation skills.

Instructor(s): C. Brittenham Terms Offered: Winter

Equivalent Course(s): ARTH 39503, LACS 29503, ARTH 29503

#### LACS 40100. Reading and Research in Latin American Studies. 100 Units.

Terms Offered: Autumn, Winter, Spring, Summer

Prerequisite(s): Consent of faculty supervisor and program adviser

Note(s): Students are required to submit the College Reading and Research Course

Form. Typically taken for a quality grade.

Equivalent Course(s): LACS 29700

#### LACS 40300. MA Paper Pre: Latin American Studies. 100 Units.

Terms Offered: Autumn, Winter, Spring, Summer Prerequisite(s): Instructor Consent required

#### LACS 40305. The Inka and Aztec States. 100 Units.

This course is an intensive examination of the origins, structure, and meaning of two native states of the ancient Americas: the Inka and the Aztec. Lectures are framed around an examination of theories of state genesis, function, and transformation, with special reference to the economic, institutional, and symbolic bases of indigenous state development. This course is broadly comparative in perspective and considers the structural significance of institutional features that are either common to or unique expressions of these two Native American states. Instructor(s): A. Kolata Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 20100,ANTH 40100,LACS 20100

#### LACS 40501. MA Proseminar. 100 Units.

Required course for the master's in Latin American Studies degree program. Students will gain an introduction to the variety of disciplinary approaches, discourses, and foci that fall under the large rubric of Latin American Studies. The proseminar introduces students to specialists in the field at the University of Chicago and to the research and investigation in which they are involved. Open only to program students.

Terms Offered: Autumn

#### LACS 42500. Anthropology of the Afro-Atlantic World. 100 Units.

Although originally pioneered, more than three generations ago, by scholars and critics such as C.L.R. James, Eric Williams, W.E.B. DuBois, or Walter Rodney, conceptions of an "Atlantic World" have only recently come to prominence in Anthropology. In the past decade, however, students of Africa and the Americas have increasingly begun to phrase their inquiries in terms transcending entrenched geographical divisions of labor within the social sciences, aiming to include Africa, the Americas, and, to a certain extent, Europe into a single analytic field. Parts of this course will be devoted to a concise introduction to some of the major theoretical positions within, and controversies surrounding the new "Atlantic" anthropology of Africa and its New World diasporas. After this, we will examine a number of recent monographs and/or major articles exemplifying the promises and pitfalls of theoretical conceptions and methodological procedures that attempt to go beyond mere transregional comparison or linear historical narratives about "African influences", and aim at analytically situating specific ethnographic or historical scenarios within integrated perspectives on an "Afro-Atlantic World". Instructor(s): S. Palmié.

Equivalent Course(s): ANTH 42500

#### LACS 44612. Political Economy of Corruption and Development. 100 Units.

This course is a graduate-level seminar covering recent theoretical and empirical research, organized around the following questions. First, what are the consequences of corruption for socio-economic development? Does corruption help or hinder it? Second, what are the causes of corruption? Is corruption affected by political and economic institutions, regime type, bureaucracy, resource endowments, or culture? Third, why has corruption varied over time within a country or state? On the empirical side, the course will emphasize issues of measurement and inference: how can one draw reliable conclusions about these questions, and what are the pitfalls along the way? The empirical readings encompass qualitative, quantitative, observational, and experimental approaches. (C)

Instructor(s): A. Simpser Terms Offered: Spring

Equivalent Course(s): PLSC 44612

#### LACS 47814. Advanced Seminar in Mesoamerican Linguistics. 100 Units.

Instructor(s): John Lucy Terms Offered: Autumn, Winter, Spring

## LACS 47901-47902-47903. Beginning Modern Spoken Yucatec Maya I; Modern Spoken Yucatec Maya II; Beginning Modern Spoken Yucatec Maya III.

This course is a basic introduction to the modern Yucatec Maya language, an indigenous American language spoken by about 750,000 people in southeastern Mexico. Three consecutive quarters of instruction are intended for students aiming to achieve basic and intermediate proficiency. Students receiving FLAS support must take all three quarters. Others may elect to take only the first quarter or first two quarters. Students wishing to enter the course midyear (e.g., those with prior experience with the language) must obtain consent of instructor. Materials exist for a second year of the course; interested students should consult the instructor. Students wishing to continue their training with native speakers in Mexico may apply for FLAS funding in the summer.

#### LACS 47901. Beginning Modern Spoken Yucatec Maya I. 100 Units.

Instructor(s): John Lucy

Equivalent Course(s): CHDV 27901, CHDV 47901, LACS 27901

#### LACS 47902. Modern Spoken Yucatec Maya II. 100 Units.

Instructor(s): John Lucy Terms Offered: Winter

Equivalent Course(s): LACS 27902

#### LACS 47903. Beginning Modern Spoken Yucatec Maya III. 100 Units.

Instructor(s): J. Lucy

Equivalent Course(s): CHDV 27903, CHDV 47903, LACS 27903

#### LACS 47902. Modern Spoken Yucatec Maya II. 100 Units.

Instructor(s): John Lucy Terms Offered: Winter

Equivalent Course(s): LACS 27902

#### LACS 47903. Beginning Modern Spoken Yucatec Maya III. 100 Units.

Instructor(s): J. Lucy

Equivalent Course(s): CHDV 27903, CHDV 47903, LACS 27903

#### LACS 60302. Colloquium: Immigration and Assimilation. Units.

This course explores the history of immigration in what is now the United States, starting with the colonial origins of Spanish, French, Dutch and English settlements, the importation of African slaves, and the massive waves of immigrants that arrived in the nineteenth and twentieth century. Additionally, we will study the adaptation of these immigrants, exploring the validity of the concept of assimilation, comparing and contrasting the experiences of the "Old" and "New" immigrants based on their race, religion, and class standing.

Instructor(s): R. Gutierrez Terms Offered: Autumn Equivalent Course(s): HIST 60302,GNSE 60300



# MASTER OF ARTS IN MIDDLE EASTERN STUDIES - SOCIAL SCIENCES

#### Director

- Fred M. Donner
   Deputy Director
- Franklin Lewis
   Deputy Director for Academic Programs
- Paul E. Walker
   Associate Director
- Thomas E. R. Maguire Project Assistant
- Traci Lombré
   Public Education Project Director
- Alexander Barna

Please see entry for Center for Middle Eastern Studies for the list of Middle Eastern Studies faculty, also available at http://cmes.uchicago.edu/.

The Center for Middle Eastern Studies offers an interdisciplinary Master of Arts program designed for students who wish to use their knowledge of the Middle East in careers other than university teaching and research. The program is also suitable for students considering an academic career who have not had the appropriate academic background for direct entrance into a doctoral program. Language and area studies preparation may be supplemented by relevant course work in a professional school or department. Students may be admitted to the Master of Arts program in either the Division of the Social Sciences or the Humanities and will receive the degree from the division through which they have registered. Students with significant previous training in Middle Eastern or Islamic studies who wish to earn a doctoral degree leading to careers in research and college or university teaching should apply for admission directly to one of the graduate doctoral departments or committees of the University.

#### **ADMISSION**

Applicants for the Master of Arts in Middle Eastern Studies are expected to meet the graduate admissions requirements of the University and of the division to which they apply. In addition, applicants to the Middle Eastern Studies program must submit an academic writing sample. Foreign students must provide evidence of English proficiency by submitting scores from either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS).

Students are encouraged to enter the program in the autumn quarter. Although the program is designed for full time students, applications from those who can attend only on a part time basis will be considered.

The application process for admission and financial aid for all Social Sciences graduate programs is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online (https://socialsciences.uchicago.edu/admissions/apply).

Questions pertaining to admissions and aid should be directed to admissions@ssd.uchicago.edu or (773) 702-8415. Most of the documents needed for the application can be uploaded through the online application. Any additional correspondence and materials sent in support of applications should be mailed to:

The University of Chicago Division of the Social Sciences Admissions Office, Foster 105 1130 East 59th Street

Program requirements

Only courses taken for a quality grade will count toward fulfilling the requirements. No P or R grades will be accepted.

The requirements are satisfactory completion of:

- Six quarters of a Middle Eastern language (through at least two year proficiency)
- One quarter core colloquium, Approaches to the Study of the Middle East
- Three quarters of an approved integrated Middle Eastern survey course
- Seven courses in relevant electives
- One course in thesis preparation, or reading and research
- A master's thesis

The Master of Arts program (including the core methodology course and a three quarter survey course, six quarter language courses and three or four relevant electives) offers a joint degree option with the Harris School of Public Policy Studies or the Chicago Booth School of Business. A student may earn the M.P.P. in Public Policy or the M.B.A. along with the M.A. in Middle Eastern Studies in an integrated joint program that normally requires a total of three years of study.

Those with previous work in Islamic studies will be advised to substitute, where appropriate, more advanced and specialized courses in the field.

#### LANGUAGE STUDY

Placement examinations will be given so that entering students may register for courses at the appropriate level of instruction. All or part of the language requirement may be met through the placement examination.

Students who elect to study Arabic will concentrate on the modern literary language. Students who elect to study Persian, Turkish, or Hebrew will concentrate on the modern and contemporary idiom.

#### ELECTIVES

In consultation with advisers, students select courses providing instruction in skills related to their future careers. These courses may be in research methodology; statistics; cross cultural, demographic, or economic analysis. They may be selected from the offerings of departments in the graduate divisions, such as the Departments of Economics, Statistics, or Sociology; or of the professional schools, such as the Chicago Booth School of Business, the Law School, the Harris School of Public Policy Studies or the School of Social Service Administration.

Students are strongly encouraged to consider participating in the University Writing Program (Little Red Schoolhouse).

#### MASTER'S THESIS

Students are required to submit a master's thesis that should deal with a problem relevant to the student's intended career and should give evidence of the specialized disciplinary aspects of his or her training. The student's program adviser and a faculty member with special interest in the subject of the paper will guide the research and writing of the paper and judge whether it exhibits proof of competence in the field.

During the writing of the paper, the student will register for a thesis preparation or reading and research course. The thesis title will be listed on the student's transcript.

#### COURSES

Consult in the quarterly Time Schedules the listings of the Departments of Art History, Anthropology, English Language & Literature, History, Music, Near Eastern Languages & Civilizations, Political Science, Sociology, South Asian Languages & Civilizations, and the Committee on Geographical Studies.



### DEPARTMENT OF ANTHROPOLOGY

#### Chair

- Stephan Palmié
  - Professors
- · Michael Dietler
- Judith B. Farquhar
- Susan Gal
- · John D. Kelly
- · Karin Knorr Cetina, Sociology
- Alan L. Kolata
- · Joseph P. Masco
- William T.S. Mazzarella
- Kathleen D. Morrison
- Stephan Palmié
- · Michael Silverstein
- Russell H. Tuttle
  - **Associate Professors**
- · Hussein Ali Agrama
- Shannon Dawdy
- · Justin Richland
- Kaushik Sunder Rajan
  - **Assistant Professors**
- Julie Y. Chu
- Michael Fisch
- Constantine Nakassis
- François G. Richard
- Alice Yao
  - Lecturer
- Susanne Cohen
- Felipe Gaitan-Amman
- Maria Ceclia Lozada Cerna
- · Mark Lycett
- Sarah Vaughn
  - **Emeritus Faculty**
- Manuela Carneiro da Cunha
- James W. Fernandez
- Raymond D. Fogelson
- Paul Friedrich

- McKim Marriott
- Nancy D. Munn
- Ralph W. Nicholas
- Marshall D. Sahlins
- Raymond T. Smith
- Terence S. Turner

Anthropology seeks an understanding of human nature, society, and culture in the widest comparative and historical framework. The department's teaching program provides Ph.D. training for research workers and teachers in the various branches of anthropological science. Lectures, tutorial guidance, laboratory instruction, and research seminars provide opportunities for advanced study in sociocultural and linguistic anthropology and archaeology. Course work, but not a graduate degree program, is also offered in physical anthropology.

The purpose of the department is the advancement of anthropological research; this goal is achieved in the graduate program by the development of creative scholars and scientists. The various educational guidelines that are established from time to time by the department as a whole as well as by the particular specialized fields are intended to aid in this development. All programs, however, are designed to be adaptable to the specific needs and research interests of individual students. Graduate students are encouraged to go forward as rapidly as previous preparation and special powers permit. The identification of specific research problems and the pursuit of these problems through the writing of original papers are skills that are emphasized and fostered as early as possible. This experience develops gradually into the substantial research project that is undertaken for the doctorate.

Graduate students and faculty in the department regularly participate in a large number of interdisciplinary workshops. Some are regional (e.g., African Studies; Latin America and the Caribbean; U.S. Locations; Art and Politics of East Asia; East Asia: Politics, Economy and Society; East Asia: Transregional Histories; Interdisciplinary Approaches to Modern France and the Francophone World; Latin American History; Middle East History and Theory; Theory and Practice in South Asia; and Visual and Material Perspectives on East Asia), some thematic (e.g., Interdisciplinary Archaeology; Ancient Societies; City, Society, and Space; Self and Subjectivity; Education; EthNoise!: Ethnomusicology; Gender and Sexuality Studies; Human Rights; Mass Culture; Knowledge/Value; Race and Religion; Reproduction of Race and Racial Ideology; Semiotics: Culture in Context; and Social History), and some theoretically oriented (e.g., Contemporary Philosophy; History, Philosophy and Sociology of Science; Political Theory; Social Theory).

Graduate students beyond the first year may serve as course or laboratory assistants, and later, as lecturers in College programs. The department also awards Starr Lectureships each year, on a competitive basis, to advanced graduate students. Starr Lecturers teach courses on their areas of specialization in the anthropology concentration in the College.

For additional information about the Department of Anthropology and the interests of its faculty members, please see: http://anthropology.uchicago.edu/

#### HOW TO APPLY

The application process for admission and financial aid for all Social Sciences graduate programs is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online at: https://applyssd.uchicago.edu/apply/

Questions pertaining to admissions and aid should be directed to admissions@ssd.uchicago.edu or (773) 702-8415. Most of the documents needed for the application can be uploaded through the online application. Any additional correspondence and materials sent in support of applications should be mailed to:

The University of Chicago Division of the Social Sciences Admissions Office, Foster 105 1130 East 59th Street

Foreign students must provide evidence of English proficiency by submitting scores from either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS).

#### PROGRAMS OF STUDY

#### SOCIOCULTURAL AND LINGUISTIC ANTHROPOLOGY

Sociocultural anthropology is concerned with the investigation of human society, culture, and the human relation to nature through intensive ethnographic investigation and wide ranging comparison. It is closely related to the other generalizing social sciences and to the interpretive disciplines of the humanities. Cross disciplinary study is encouraged; graduate students in anthropology often include courses from related fields in their programs.

The Ph.D. program in sociocultural and linguistic anthropology has three prefield phases, each normally designed as one year's work, although under certain circumstances accelerated progress through the later phases is possible.

Phase I introduces the student to the development of social and cultural theory and to the scholarly interests of the faculty in the department. First year students also take courses in particular specialist areas of ethnography and theory in order to frame research interests in preparation for the dissertation project. Course requirements in the first year include The Development of Social and Cultural Theory (two double courses) and Introduction to Chicago Anthropology. In addition students take four other courses dealing with their areas of interest selected in consultation with the first year advisor. The requirements of Phase I apply to all entering graduate students, regardless of whether they hold a master's degree in anthropology from another institution.

Phase II training is directed toward acquiring a deeper knowledge of the special area and theoretical topics on which research will be focused, as well as toward obtaining a broader anthropological understanding in preparation for the Ph.D. qualifying examination. With the exception of those whose master's theses from elsewhere are approved by the department, every second year student completes

a master's paper during that year. The Ph.D. qualifying examination is normally taken during the spring of the second year or the autumn of the third year. The department also requires all students in sociocultural and linguistic anthropology to take the course in Anthropological Research Methods and to demonstrate competence in a foreign language by achieving a High Pass on a University foreign language reading examination, preferably by the end of the second year. The language will be specified by the student's advisory committee. (A foreign language is required only for the Ph.D. degree. No foreign language is required for the M.A.)

Phase III is a pre research training period during which the student hones a dissertation proposal and grant applications and develops advanced research skills. Upon fulfillment of all pre dissertation academic requirements and the acceptance of the dissertation proposal at a hearing in the department, the student is admitted to candidacy for the Ph.D. degree and proceeds to research and/or field work and the writing of the dissertation.

The linguistic anthropologist is concerned with phonetic, phonological, grammatical, semantic, and paralinguistic systems and with their relations to social, cultural and personal ones. A student who chooses linguistic anthropology as the major sub field within the Department of Anthropology should prepare at least one sub field each in linguistics and anthropology and satisfy the language requirement. Students of linguistic anthropology are generally advised to take at least six courses in technical linguistics.

#### JOINT DEGREE IN ANTHROPOLOGY AND LINGUISTICS

In addition to linguistic anthropology as a sub field within the Department of Anthropology, there is also a joint Ph.D. program available to students who are admitted first to the Department of Anthropology and subsequently to the Department of Linguistics. Joint degree students complete the requirements of both departments, including distinct introductory and advanced courses stipulated by each, the departmental qualifying examinations in appropriate special fields, and the language requirements, including additional foreign languages for the Linguistics Ph.D. The student's dissertation advisory committee consists of three or more members of the faculty; at least one must be a member of the Department of Anthropology but not the Department of Linguistics, and at least one in Linguistics but not in Anthropology. After approval for hearing by the advisory committee, the student's dissertation proposal must be approved in a hearing open to the faculty of both departments, and similarly for the final defense of the single doctoral dissertation that the student writes.

Admission to the Joint Degree Program in Anthropology and Linguistics cannot be approved until at least the second year, after successful completion of the core (first year) coursework and examinations in Linguistics, although students should declare interest in the joint program on the graduate application and to the chair of the Department of Anthropology and to the linguistic anthropologists soon after arriving on campus.

#### ARCHAEOLOGY

The archaeology program emphasizes the comparative study of complex societies throughout the world grounded in a close articulation of archaeology, history and sociocultural anthropology. The program stresses the integration of social and cultural theory in the practice of archaeology and, in particular, forges strong links with the historical anthropology that is one of the recognized strengths of the department. In addition to preparing archaeology students for anthropologically informed fieldwork and interpretation, an important element of this interdisciplinary approach is the inauguration of a training program offering students the methodological skills and theoretical grounding necessary to undertake innovative ethnoarchaeological research.

Current faculty strengths include archaeology of Latin America (focusing on the later prehistory and colonial periods of the Andes and Mesoamerica), the United States (focusing on the historical/urban archaeology of New Orleans and Birmingham, creole societies, race and ethnicity, material culture), Europe (from the Paleolithic to the Celtic Iron Age), South Asia and Oceania (state formation in South India, agricultural intensification, precolonial an early colonial periods), and China and mainland southeast Asia (Bronze age, imperialism, cross cultural interactions) as well as ethnoarchaeology in Africa and experimental archaeology in South America. Associated faculty at the Oriental Institute and in other University departments specialize in complex societies of the Near East, Egypt, Greece, Rome, India, and China.

Research interests include: urbanism, state formation, imperialism, colonial interaction, industrialization, art and symbolism, spatial analysis, politics, ritual and religion, human environment interactions, agricultural systems, material culture, economic anthropology, political economy and the socio historical context and politics of archaeology. Faculty members in archaeology have major, ongoing field research projects in Bolivia, Peru, France, Spain, Cambodia, India, China, Senegal, and the southern & southeastern United States and also have research interests in Kenya and Hawaii.

The archaeology program requires that students complete a total of 18 courses to qualify for the Ph.D., some of which may be reading and research in the field of specialization. Students normally enroll in nine courses per year during their first two years in the program. Within the first two years, students will complete five required courses that are designed to provide a comprehensive grounding in social and cultural theory, as well as the theory and specific methods of archaeology. (A foreign language is required only for the Ph.D. degree. No foreign language is required for the M.A.)

In the first year, course requirements include The Development of Social and Cultural Theory offered over the autumn and winter quarters. The two quarter sequence is equivalent to four course credits. In the spring archaeology students take Theory and Method in Archaeology, also a double credit course. The remaining course requirements in the program, to be met in the first or second year, are Introduction to Chicago Anthropology, and a quantitative methods course approved by the faculty. For the rest of their course work, students enjoy a broad range

of elective courses in archaeology, sociocultural anthropology, history, physical anthropology, Classical or Near Eastern studies, statistics, computer science and geophysical sciences. In addition, archaeology students are strongly encouraged to gain technical experience in one of the university's regular summer field schools or other research excavations.

By the end of the first year in residence, the archaeology student must form an advisory committee of three faculty members. The committee will be chaired by the faculty member of the student's choice. With the exception of those students with A.M. theses from other institutions which are approved by the department, each student will complete an A.M. paper during the second year. In addition, by the end of year two, each student takes an written and oral examination from the members of his/her advisory committee in the areas of chosen specialization. The oral examination, lasting roughly an hour and a half, is designed to test basic command of the literature and methods necessary to pursue Ph.D. research in a chosen area. In the third year, having passed the qualifying exam, archaeology students are required to take the archaeological research design seminar. By the end of the third year, students must defend a dissertation proposal before the faculty and interested students. Upon fulfillment of all academic requirements and the acceptance of the dissertation proposal, students are admitted to candidacy for the Ph.D. degree.

#### PHYSICAL ANTHROPOLOGY

Courses in physical anthropology, mainly directed towards evolutionary anthropology and primatology, are offered in the department; but applications for graduate study in Physical Anthropology are no longer accepted.

#### COURSES

The department website offers descriptions of graduate courses scheduled for the current academic year: http://anthropology.uchicago.edu/undergrad\_program/ graduate\_courses

#### **ANTHROPOLOGY COURSES**

## ANTH 30000. Classical Readings in Anthropology: Anthropological Theory. 100 Units.

Since its inception as an academically institutionalized discipline, anthropology has always addressed the relation between a self-consciously modernizing West and its various and changing others. Yet it has not always done so with sufficient critical attention to its own concepts and categories—a fact that has led, since at least the 1980s, to considerable debate about the nature of the anthropological enterprise and its epistemological foundations. This course provides a brief critical introduction to the history of anthropological thought over the course of the discipline's long twentieth century, form the 1880s to the present. Although we focus on the North American and British traditions, we review important strains of French and, to a lesser extent, German social theory in chronicling the emergence and transformation of modern anthropology as an empirically based, but theoretically informed, practice of knowledge production about human sociality and culture.

Instructor(s): Staff Terms Offered: TBA Equivalent Course(s): ANTH 21107

#### ANTH 30405. Anthropology of Disability. 100 Units.

This seminar undertakes to explore "disability" from an anthropological perspective that recognizes it as a socially constructed concept with implications for our understanding of fundamental issues about culture, society, and individual differences. We explore a wide range of theoretical, legal, ethical, and policy issues as they relate to the experiences of persons with disabilities, their families, and advocates. The final project is a presentation on the fieldwork.

Instructor(s): M. Fred Terms Offered: Autumn

Prerequisite(s): Third- or fourth-year standing

Equivalent Course(s): MAPS 36900, ANTH 20405, CHDV 30405, HMRT 25210, HMRT

35210,SOSC 36900

#### ANTH 30415. American Legal Culture. 100 Units.

This seminar examines how the values and norms of American Legal Culture are constructed through both the experiences of the general public and socialization of key actors in institutions such as law schools/firms, popular media, courts, police, and jails/prisons. Sessions combine discussion of relevant literature with presentations by Chicago-area experts from these various institutions. Seminar participants conduct fieldwork in related sites in the Chicago area, presenting the results of their research projects in the final session(s) of the course.

Instructor(s): M. Fred Terms Offered: Not offered 2012–13; will be offered 2013–14 Prerequisite(s): Third- or fourth-year standing for undergraduates

Equivalent Course(s): LAWS 93801, MAPS 46701, LLSO 26203, SOSC 30416

## ANTH 30705. Intensive Study of a Culture: Lowland Maya History and Ethnography. 100 Units.

The survey encompasses the dynamics of first contact; long-term cultural accommodations achieved during colonial rule; disruptions introduced by state and market forces during the early postcolonial period; the status of indigenous communities in the twentieth century; and new social, economic, and political challenges being faced by the contemporary peoples of the area. We stress a variety of traditional theoretical concerns of the broader Mesoamerican region stressed (e.g., the validity of reconstructive ethnography; theories of agrarian community structure; religious revitalization movements; the constitution of such identity categories as indigenous, Mayan, and Yucatecan). In this respect, the course can serve as a general introduction to the anthropology of the region. The relevance of these area patterns for general anthropological debates about the nature of culture, history, identity, and social change are considered.

Instructor(s): J. Lucy Terms Offered: Autumn

Equivalent Course(s): ANTH 21230

#### ANTH 31700. Slavery and Unfree Labor. 100 Units.

This course offers a concise overview of institutions of dependency, servitude, and coerced labor in Europe and Africa, from Roman times to the onset of the Atlantic slave trade, and compares their further development (or decline) in the context of the emergence of New World plantation economies based on racial slavery. We discuss the role of several forms of unfreedom and coerced labor in the making of the "modern world" and reflect on the manner in which ideologies and practices associated with the idea of a free labor market supersede, or merely mask, relations of exploitation and restricted choice.

Instructor(s): S. Palmié Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 22205, CRES 22205, LACS 22205, LACS 31700

#### ANTH 32100. Culture, Power, Subjectivity. 100 Units.

This course takes up the classic, yet endlessly fascinating subject of the relationship of historically produced cultural structures and their relationship to individual and collective forms of subjectivity. Since the topic is huge, we will address it by reading classic texts in depth, analyzing them for the diverse ways in which classic social thinkers like Marx, Durkheim, Weber, Althuser, Bourdieu and Foucault have thought about the relationship between individuals and collectivities. Key questions we will address include the ways in social and economic formations structure the possibilities for individual human action, the relationship between religious formations and historical transformations, the role of class in the inculcation of taste and desire, and the ways in which, throughout the 19th century, new power/knowledge formations have created new ways through with subject formation takes place. (B, C\*)

Instructor(s): J. Cole Terms Offered: Winter

Prerequisite(s): Undergraduates require consent of instructor.

Note(s): Not offered 2013-14.

Equivalent Course(s): CHDV 32100

#### ANTH 32110. Culture and Power, Part II: Discourse and Performativity. 100 Units.

This class is the second part of a two part sequence entitled Culture, Power, Subjectivity although it is not necessary to take them in sequence. Part 1 typically examines history and structure as these have been addressed either by classic social theorists (Marx, Weber, Foucault) or anthropologists and historians (Sewell, Comaroffs, Sahlins/sub-altern studies). In this quarter, we focus on two different analytic constructs that anthropologists have used to theorize the nature of subjects and their relationship to historically produced social and cultural formations: discourse and performativity. We will situate these analytic approaches in terms of two distinct theoretical lineages—the one drawn from the Russian socio-historical tradition, the other derived from post-structuralist theory. The basic approach taken in class will be to learn the theories through close reading of texts, and then read several examples of how various scholars—usually anthropologists—use them in their own work. Readings include Vygotsky, Voloshinov, Bakhtin, Austin, Butler (and perhaps a few others). (C\*)

Instructor(s): J. Cole Terms Offered: Spring 2013

Prerequisite(s): Consent of instructor required for undergraduates.

Equivalent Course(s): CHDV 32101

#### ANTH 32200. Intensive Study of a Culture: Modern China. 100 Units.

Contemporary China is often spoken of as undergoing deep and rapid social change. Certainly globalizing forces have been especially evident in all parts of China over the last couple of decades. At the same time, like the rest of East Asia and the Pacific Rim, China has developed distinctive social, cultural, and political forms, many of which circulate nationally and transnationally. This course comes to terms with both the processes of change that have characterized the last few decades and with a few recent social and cultural phenomena of interest. Because the scholarly literature lags behind the pace of transformation in China, we draw on a wide variety of materials: ethnography, memoir, fiction, films, essays, historical studies, short stories, websites. Emphasis in class discussions is on grasping how contemporary Chinese realities are experienced from viewpoints within China this is the sense in which the course is intensive study of a "culture." Readings and materials are divided into several major units concerned with historical memory, rural China, urban life, labor migration, and popular culture. Students undertake, as a term project, their own investigation of some aspect of contemporary cultural change in China.

Instructor(s): J. Farquhar Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 21251

## ANTH 32220. Love, Conjugality, and Capital: Intimacy in the Modern World. 100 Units.

A look at societies in other parts of the world demonstrates that modernity in the realm of love, intimacy, and family often had a different trajectory from the European one. This course surveys ideas and practices surrounding love, marriage, and capital in the modern world. Using a range of theoretical, historical, and anthropological readings, as well as films, the course explores such topics as the emergence of companionate marriage in Europe and the connections between arranged marriage, dowry, love, and money. Case studies are drawn primarily from Europe, India, and Africa.

Instructor(s): J. Cole, R. Majumdar Terms Offered: Winter 2013 Prerequisite(s): Any 10000-level music course or consent of instructor Note(s): This course typically is offered in alternate years.

#### ANTH 32225. Transnational Kinship, Intimacy and Migration. 100 Units.

Across the world, people are on the move like never before: migration across national boundaries is a fact of life. And kinship -- the making and transforming of families, and the way kin processes interact with states and political economies, is central to this process. Not only do migrants often immigrate in order to support families back in their countries of origin, even babies or genetic material can also cross transnational boundaries in order to create new kinds of families. This course comprises an intensive introduction to recent literature on the question of kinship and migration. Questions we will address include: What are the effects of family reunification law which explicitly tries to privilege certain kinds of families in the context of migration? What happens when the roles traditionally associated with wifehood or motherhood stretch across national boundaries? What happens when people adopt children from other countries, grafting them onto new families? And how does the circulation of genetic material in the case of assisted reproduction create new kinds of belonging? By reading a series of recent ethnographies on issues including marriage migration and adoption, participants will gain insight into the complex ways in which the making and unmaking of kin ties creates new kinds of belonging and new forms of exclusion in the today's world. (C, 3)

Instructor(s): J. Cole Terms Offered: Spring

Prerequisite(s): Self, Culture, and Society or equivalent

Note(s): Not offered 2013-14

Equivalent Course(s): CHDV 30117

#### ANTH 32300. The Anthropology of Science. 100 Units.

Reading key works in the philosophy of science, as well as ethnographic studies of scientific practices and objects, this course introduces contemporary science studies. We interrogate how technoscientific "facts" are produced, discussing the transformations in social order produced by new scientific knowledge. Possible topics include the human genome project, biodiversity, and the digital revolution.

Instructor(s): J. Masco Terms Offered: Spring Equivalent Course(s): ANTH 22105,HIPS 21301

#### ANTH 32315. Anthropology of the Machine. 100 Units.

Postwar cybernetics is typically associated with the emergence of information theory, the development of digital computing, Cold War infrastructure, and research into Artificial Intelligence. As such, it is problematized for its relation to the military industrial complex, novel mechanisms of social control, and dismal science fiction scenarios. Yet postwar cybernetics also gave rise to another more philosophically oriented conceptual trajectory concerned with a theory of in-formation, Artificial Life, and new ways thinking technology. This seminar is primarily concerned with this latter dimension of cybernetics and attempts to draw attention to its pervasive presence in contemporary social thought. Specifically, we will trace its resonance in current anthropological trends that emphasize emergence, non-representational theory, materiality, affect, and intensity. In addition, we will explore the kind of methodology that it suggests. The seminar will involve a close reading and discussion of texts and is intended mainly for Ph.D. students. Instructor(s): M. Fisch

#### ANTH 32410. Introduction to Science and Technology Studies. 100 Units.

Science, technology and information are the 'racing heart' of contemporary cognitive capitalism and the engine of change of our technological culture. They are deeply relevant to the understanding of contemporary societies. But how are we to understand the highly esoteric cultures and practices of science, technology and information? During the twentieth century, sociologists, historians, philosophers, and anthropologists raised original, interesting, and consequential questions about the sciences and technology. Often their work drew on and responded to each other, and, taken together, their various approaches came to constitute a field, "science and technology studies." The course furnishes an initial guide to this field. Students will not only encounter some of its principal concepts, approaches, and findings, but will also get a chance to apply science-studies perspectives themselves by performing a fieldwork project. Among the topics we examine are the sociology of scientific knowledge and its applications, constructivism and actor network theory, the study of technology and information, as well as recent work on knowledge and technology in the economy and finance. Beginning with the second week of classes, we will devote the second half of the class to presentations and discussion. Instructor(s): K. Knorr Cetina Terms Offered: Not offered 2013-14

Instructor(s): K. Knorr Cetina Terms Offered: Not offered 2013-14 Equivalent Course(s): SOCI 30217,CHSS 30217,ANTH 22410,SOCI 20217

#### ANTH 32530. Ethnographic Film. 100 Units.

This seminar explores ethnographic film as a genre for representing "reality," anthropological knowledge, and cultural lives. We examine how ethnographic film emerged in a particular intellectual and political economic context, as well as how subsequent conceptual and formal innovations have shaped the genre. We also consider social responses to ethnographic film in terms of (1) the contexts for producing and circulating these works, (2) the ethical and political concerns raised by cross-cultural representation, and (3) the development of indigenous media and other practices in conversation with ethnographic film. Throughout the course, we situate ethnographic film within the larger project for representing "culture," addressing the status of ethnography, museum exhibitions, documentary practices (e.g., written ethnography, museum exhibitions, documentary film). Instructor(s): J. Chu Terms Offered: Spring

Equivalent Course(s): ANTH 22530

## ANTH 32535. Engaging Media: Thinking about Media and Their Audiences. 100 Units.

In the first part of the course we look at how post-World War II mass communications and "classical" film theory theorized communication and spectatorship; in particular, we trace the dialogue between these liberatory models and the totalitarianism and propaganda (i.e., top-down models of control) of the times. We then look at theories of mass media reception and spectatorship that put ideology at the center of their analysis, interrogating theories of the "receiver" of media messages as cultural dope (Frankfurt school Marxism), psychoanalytic and (post-)Marxist theories of spectatorship ("Screen" theory), feminist critiques of film spectatorship, and reactions to the above in cognitivist film studies. We then turn to British Cultural Studies' theories of media, focusing on how such work attempts to reconcile models of reception as ideologically unproblematic and as determined by the ideological structures of production and reception. Particular focus is given to the theoretical arguments regarding ideology and media, the notion of "code," and the differences and similarities in the model of communication with the sociology of mass communication. In the second half of the course we look at anthropological approaches to media and how anthropologists have taken up the issue of media reception. Why have anthropologists largely ignored media and reception studies until recently? What kinds of contributions can anthropology make to the theorization and methodological approach to reception? By critically looking at ethnographies of reception, we problematize the concept of reception proper, looking at more holistic ways of dealing with the issue of the mediation of social life. In the final part of the course we re-evaluate what we mean by "mass media" and "reception." First we look media (con)texts that blur the duality of production/reception. We then consider new forms of media and to what extent "reception" as a category even makes sense in attempting to understand how engagement with such new media functions.

Instructor(s): C. Nakassis

Equivalent Course(s): ANTH 22535

## ANTH 33106. Indigeneities. 100 Units.

Depending on how you look at it, questions of indigeneity—the who, how, what, and why of peoples that either identify, or are identified, as "native"—are questions that at once transcend, entail, and/or are produced by Euro-American scholarly, political, and legal inquiry. Whether assailed as the product of colonial orientalism or celebrated as the ur-subjectivity of those who resist it (or something in between), the claims of, to, and about indigeneity continue to excite and demand attention scholarly and political. Indeed some argue that politics of indigeneity have gained unique traction in recent decades, as indigenous actors, scholars, and their advocates have pressed for changes to legal, political, and cultural/scientific regimes that have indigenous affairs as their chief objects of inquiry. One need only consider the 2007 passage of the UN Declaration of the Rights of Indigenous Peoples, the legal decisions acknowledging the force of native title in the Supreme Courts of Australia and Canada, and even the changes in various regimes of research concerning the social scientific study of native peoples and/or the representation of their material culture, all of which happened less than 20 years ago. Despite these long-standing interests and recent social, politica,l and economic gains, indigenous communities remain among the most vulnerable in the world. These trenchant inequalities beg the question, how does the condition of indigeneity relate to the various social forces shaping the world today and to the lived experiences of those who claim to be, or get named as, indigenous. It is towards an exploration of this question that this course is dedicated. Among the lines of inquiry that we will pursue in the course are: (1) tracing the genealogies of indigeneity as a notion, both in Euro-American human sciences and in other epistemological traditions; (2) considering the role that notions of indigeneity play in contemporary national and international political regimes; (3) exploring how indigeneity is claimed or disclaimed, by different peoples around the world, and why; and (4) considering the ways in which notions of indigeneity are being figured in new regimes of possession and commodification, including intellectual property, genetics and genome mapping, and the role of indigenous knowledge in resource extraction and bioprospecting. In pursuing these questions this course will endeavor to tease out the manifold relationships that the rising politics of indigeneity at the dawn of the 21st century has to other global political economic phenomena. Simultaneously, the course will also attend to the ways in which different peoples, caught up in different sociopolitical milieu, orient to the notion of indigeneity as it articulates with their lived experiences with matters of autochthony (the state of being "from here"), allochthony (being "from elsewhere"), and the consequences of those distinctions to their everyday lives.

Instructor(s): J. Richland

Equivalent Course(s): ANTH 22606

#### ANTH 33107. Indigenous Methodologies. 100 Units.

The 1969 publication of Vine Deloria Jr.'s Custer Died for your Sins forever changed the landscape for academic research with indigenous communities in North America, if not the world. Declaring, "Indians have been cursed above all other peoples in history. Indians have anthropologists," (Deloria 1988[1969]: 78), Deloria's broadside was aimed at a social science academy whose research methods, ethics and findings he felt offered little concrete benefit to the indigenous peoples whose lives they studied. Whether accurate or not, the critique sent ripples not only through the academy, but through policy circles, and the native communities themselves, inaugurating a period of remarkable refiguring of the legal, scholarly, and interpersonal landscapes against which social science research on indigenous peoples is constituted. This refiguring has emerged in a variety of modes, and with different effects and outcomes. In this course, students will be introduced to the evolving ethics, methods, policies and epistemologies shaping social science research with indigenous communities in North America. In addition, in the second half of the quarter, students will get first hand experience working on issues of relevance to social science research with Indigenous communities under the supervision of Prof. Richland and leadership at two institutions in Chicago - the Title VII American Indian Education Program, and the North American Anthropology Division of The Field Museum. In this part of the course, students will be paired up and work on independent projects that are designed to address the needs and interests of these organizations and the indigenous peoples with which they work, and then to initiate their own academic inquiry alongside those projects. These projects will provide you with an opportunity to understand and implement the theories, ethics, and methods learned in class, revealing the rewards and challenges of conducting research programs that engage leading theories and debates in the academy while also making real contributions to the indigenous communities with which students are working.

Instructor(s): J. Richland

Equivalent Course(s): ANTH 22609

#### ANTH 33610. Medicine and Society in Twentieth-Century China. 100 Units.

This course is a survey of historical and anthropological approaches to medical knowledge and practice in twentieth-century China. Materials cover early modernizing debates, medicine and the state, Maoist public health, traditional Chinese medicine, and health and medicine in popular culture.

Instructor(s): J. Farquhar Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 23600,HIPS 22601

## ANTH 33620. Medicine and Anthropology. 100 Units.

The rise of modern biological medicine into global dominance dates from the 18th century, with the field developing in tandem with technological industrialization, scientific objectivism, and secular modernism in writing and social theory. The things we now have before us in the medical field - doctors, patients, drugs, symptoms, diseases, pacemakers, antiseptic wipes, psychologies, therapeutic protocols, health insurance, white coats, immunizations, folk remedies, and much more—are many of the things that ground all of our ethics and our politics in contemporary North America. In order to better understand how medicine affects wider worlds of experience and action, this course gathers a number of historical and ethnographic studies of medical knowledge and practice for careful study. In a series of readings and discussions we will consider the social and political economic shaping of illness and suffering and the "culture-bound" character of diseases; we will examine medical and healing systems—well beyond biomedicine—as social institutions and as sources of epistemological authority; and we will read about the knowledge politics of medical experts and their clients and patients. Topics covered will also include the problem of belief; local theories of disease causation and healing efficacy; the placebo effect and contextual healing; theories of embodiment; medicalization; modernity and the distribution of risk; the meanings and effects of medical technologies; and the relatively recent global health movement.

Instructor(s): J. Farguhar Terms Offered: Winter

Equivalent Course(s): ANTH 23620

### ANTH 34502. Anthropology of Museums I. 100 Units.

Instructor(s): M. Fred Terms Offered: Winter

Prerequisite(s): Advanced standing and consent of instructor

Equivalent Course(s): ANTH 24511, CHDV 38101, CRES 34501, MAPS 34500, SOSC

34500

#### ANTH 34705. Jurisdiction: Language and the Law. 100 Units.

Instructor(s): J. Richland

Equivalent Course(s): ANTH 24705

## ANTH 34900. Big Science and the Birth of the National Security State. 100 Units.

This course examines the mutual creation of big science and the American national security state during the Manhattan Project. It presents the atomic bomb project as the center of a new orchestration of scientific, industrial, military, and political institutions in everyday American life. Exploring the linkages between military technoscience, nation-building, and concepts of security and international order, we interrogate one of the foundation structures of the modern world system.

Instructor(s): J. Masco Terms Offered: Not offered 2013-14; will be offered 2014-15

Equivalent Course(s): ANTH 22400, HIPS 21200

#### ANTH 35110. Cultural Psychology. 100 Units.

There is a substantial portion of the psychological nature of human beings that is neither homogeneous nor fixed across time and space. At the heart of the discipline of cultural psychology is the tenet of psychological pluralism, which states that the study of "normal" psychology is the study of multiple psychologies and not just the study of a single or uniform fundamental psychology for all peoples of the world. Research findings in cultural psychology thus raise provocative questions about the integrity and value of alternative forms of subjectivity across cultural groups. In this course we analyze the concept of "culture" and examine ethnic and cross-cultural variations in mental functioning with special attention to the cultural psychology of emotions, self, moral judgment, categorization, and reasoning. (B\*, C\*; 2\*, 3\*) Instructor(s): R. Shweder Terms Offered: Autumn

Prerequisite(s): Third- or fourth-year standing. Instructor consent required. Equivalent Course(s): CHVD 31000,PSYC 23000,PSYC 33000,ANTH 24320,HDCP 41050,GNSE 21001,GNSE 31000,AMER 33000,CHDV 21000

# ANTH 35125. Emotions and Culture, Paradigms of Empirical and Theoretical Analysis. 100 Units.

The sociology of emotions is of increasing interest to contemporary societies. We believe now that even intelligence is dependent on emotions, and we find, in a variety of settings, that emotions and emotional energy directly influence situational and organization outcomes. The course gives an overview of the current state of the analysis of emotions in social science fields. Students will be asked to read, analyze, and discuss major works in the social studies of emotions in class, and to think about ways to apply emotional concepts in future research. Particular attention will go to analyzing the challenges for theorization and empirical specification. Instructor(s): K. Knorr Cetina Terms Offered: Winter

Equivalent Course(s): SOCI 20203, ANTH 25125, SOCI 30203

## ANTH 35305. Anthropology of Food and Cuisine. 100 Units.

Contemporary human foodways are not only highly differentiated in cultural and social terms, but often have long and complicated histories. Anthropologists have long given attention to food. But, until quite recently, they did so in an unsystematic, haphazard fashion. This course explores several related themes with a view towards both the micro- and macro-politics of food by examining a range of ethnographic and historical case studies and theoretical texts. It takes the format of a seminar augmented by lectures (during the first few weeks), scheduled video screenings, and individual student presentations during the rest of the course.

Instructor(s): S. Palmié Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 25305

#### ANTH 35325. History and Culture of Baseball. 100 Units.

Study of the history and culture of baseball can raise in a new light a wide range of basic questions in social theory. The world of sports is one of the paradoxical parts of cultural history, intensely intellectually scrutinized and elaborately "covered" by media, yet largely absent from scholarly curricula. Perhaps more than any other sport, baseball has even drawn a wide range of scholars to publish popular books about it, yet has produced few professional scholars whose careers are shaped by study of it. In this course, we will examine studies that connect the cultural history of baseball to race, nation, and decolonization, to commodity fetishism and the development of capitalist institutions, to globalization and production of locality. We will compare studies of baseball from a range of disciplinary perspectives (economics, evolutionary biology, political science, history, and anthropology) and will give special attention to the culture and history of baseball in Chicago. We hope and expect that this course will be a meeting ground for people who know a lot about baseball and want to learn more about cultural anthropology, and people who are well read in anthropology or social theory who want to know more about baseball. The course will draw heavily on the rich library of books and articles about baseball, scholarly and otherwise, and will also invite students to pursue their own research topics in baseball culture and history.

Instructor(s): J. Kelly

Equivalent Course(s): ANTH 25325

## ANTH 35410. Anthropology of Everyday Life. 100 Units.

In an effort to clarify the field of everyday life ethnography and stimulate critical reflection on the everyday lives we all lead, this course draws on three bodies of literature: (1) classic anthropological approaches to studying social life (e.g., behaviorism and utilitarianism, the sacred/profane distinction, phenomenology, habitus and practice); (2) twentieth-century cultural Marxist critical theory; and (3) recent studies of popular culture. This course includes a workshop component to accommodate student projects.

Instructor(s): J. Farquhar Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 25410

## ANTH 35500. The Anthropology of Development. 100 Units.

This course applies anthropological understanding to development programs in "underdeveloped" and "developing" societies. Topics include the history of development; different perspectives on development within the world system; the role of principal development agencies and their use of anthropological knowledge; the problems of ethnographic field inquiry in the context of development programs; the social organization and politics of underdevelopment; the culture construction of "well-being;" economic, social, and political critiques of development; population, consumption, and the environment; and the future of development.

Instructor(s): A. Kolata Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 22000, ENST 22000

## ANTH 35710. Global Society and Global Culture: Paradigms of Social and Cultural Analysis. 100 Units.

This course introduces students to major theories of globalization and to core approaches to global society and global culture. We discuss micro- and macroglobalization, cultural approaches to globalization, world systems theory, glocalization and hybridization approaches and the "strong program" in globalization studies. Empirically oriented topics include global love, global finance, global terrorism and the globalization of nothing. The empirical ethnographies of the global are chosen to illustrate the interest and feasibility of globalization studies and of critical studies of dimensions of globalization.

Instructor(s): K. Knorr Cetina Terms Offered: Autumn Equivalent Course(s): SOCI 20169, ANTH 25710, SOCI 30169

#### ANTH 36200. Ceramic Analysis for Archaeologists. 100 Units.

This course introduces the theoretical foundations and analytical techniques that allow archaeologists to use ceramics to make inferences about ancient societies. Ethnographic, experimental, and physical science approaches are explored to develop a realistic, integrated understanding of the nature of ceramics as a form of material culture. Practical training in the use of the ceramic labs is included.

Instructor(s): M. Dietler Terms Offered: Winter

Prerequisite(s): Consent of instructor

#### ANTH 36700. Archaeology of Race and Ethnicity. 100 Units.

The correlation between ethnic groups and patterns in material culture lies at the heart of many archaeological problems. Over the last several years, a new emphasis on the social construction of racial and ethnic identities has invited a re-examination of the ways in which aspects of the material world (i.e., architecture, pottery, food, clothing) may participate actively in the dialectical process of creating or obscuring difference. This seminar surveys historical debates and engages with current theoretical discussions within archaeology concerning race and ethnicity in complex societies.

Instructor(s): S. Dawdy Terms Offered: Will be offered 2013–14

Prerequisite(s): Consent of instructor

#### ANTH 36705. Celts: Ancient, Modern, Postmodern. 100 Units.

Celts and things Celtic have long occupied a prominent and protean place in the popular imagination, and "the Celts" has been an amazingly versatile concept in the politics of identity and collective memory in recent history. This course is an anthropological exploration of this phenomenon that examines: (1) the use of the ancient past in the construction of modern nationalist mythologies of Celtic identity (e.g. in France and Ireland) and regional movements of resistance to nationalist and colonialist projects (e.g. in Brittany, Ireland, Scotland, Wales, Gallicia, Asturias); (2) the construction of transnational ethno-nostalgic forms of Celtic identity in modern diasporic communities (Irish, Scottish, etc.); and (3) various recent spiritualist visions of Celticity that decouple the concept from ethnic understandings (e.g. in the New Age and Neo-Pagan movements). All of these are treated in the context of what is known archaeologically about the ancient peoples of Europe who serve as a symbolic reservoir for modern Celtic identities. The course explores these competing Celtic imaginaries in the spaces and media where they are constructed and performed, ranging from museums and monuments, to neo-druid organizations, Celtic cyberspace, Celtic festivals, Celtic theme parks, Celtic music, Celtic commodities, etc.

Instructor(s): M. Dietler

Equivalent Course(s): ANTH 21265

## ANTH 36740. Economic Organization of Ancient Complex Societies. 100 Units.

,This course provides undergraduate and graduate students with an overview of some of the basic theoretical and methodological issues involved in the study of ancient complex societies, primarily through archaeological evidence supplemented by textual data.,

Instructor(s): G. Stein Terms Offered: Spring

Equivalent Course(s): NEAA 20045, ANTH 26740, NEAA 30045

#### ANTH 37201-37202. Language in Culture I-II.

This two-quarter course presents the major issues in linguistics of anthropological interest. These courses must be taken in sequence.

### ANTH 37201. Language in Culture I. 100 Units.

Among topics discussed in the first half of the sequence are the formal structure of semiotic systems, the ethnographically crucial incorporation of linguistic forms into cultural systems, and the methods for empirical investigation of "functional" semiotic structure and history.

Instructor(s): M. Silverstein Terms Offered: Autumn

Prerequisite(s): Consent of instructor

Equivalent Course(s): CHDV 37201,LING 31100,PSYC 47001

#### ANTH 37202. Language in Culture II. 100 Units.

The second half of the sequence takes up basic concepts in sociolinguistics and their critique.

Instructor(s): C. Nakassis Terms Offered: Winter

Prerequisite(s): Consent of instructor

Equivalent Course(s): LING 31200, PSYC 47002

## ANTH 37202. Language in Culture II. 100 Units.

The second half of the sequence takes up basic concepts in sociolinguistics and their critique.

Instructor(s): C. Nakassis Terms Offered: Winter

Prerequisite(s): Consent of instructor

Equivalent Course(s): LING 31200, PSYC 47002

#### ANTH 37500. Morphology. 100 Units.

This course deals with linguistic structure and patterning beyond the phonological level. We focus on analysis of grammatical and formal oppositions, as well as their structural relationships and interrelationships (morphophonology).

Instructor(s): Staff Terms Offered: Spring

## ANTH 37605. Language, Culture, and Thought. 100 Units.

Survey of research on the interrelation of language, culture, and thought from the evolutionary, developmental, historical, and culture-comparative perspectives with special emphasis on the mediating methodological implications for the social sciences.(B\*, C\*; 2\*, 3\*, 5\*)

Instructor(s): J. Lucy Terms Offered: Spring

Equivalent Course(s): CHDV 21901, ANTH 27605, CHDV 31901, HDCP 41950, PSYC 21950, PSYC 31900

#### ANTH 38100. Evolution of the Hominoidea. 200 Units.

This course is a detailed consideration of the fossil record and the phylogeny of Hominidae and collateral taxa of the Hominidae that is based upon studies of casts and comparative primate osteology.

Instructor(s): R. Tuttle Terms Offered: Winter

Prerequisite(s): Third- or fourth-year standing and consent of instructor

Equivalent Course(s): ANTH 28100, EVOL 38100, HIPS 24000

#### ANTH 38200. Comparative Primate Morphology. 200 Units.

This course covers functional morphology of locomotor, alimentary, and reproductive systems in primates. Dissections are performed on monkeys and apes. Instructor(s): R. Tuttle Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 28300, EVOL 38200, HIPS 23500

#### ANTH 38210. Colonial Ecologies. 100 Units.

This seminar explores the historical ecology of European colonial expansion in a comparative framework, concentrating on the production of periphery and the transformation of incorporated societies and environments. In the first half of the quarter, we consider the theoretical frameworks, sources of evidence, and analytical strategies employed by researchers to address the conjunction of environmental and human history in colonial contexts. During the second half of the course, we explore the uses of these varied approaches and lines of evidence in relation to specific cases and trajectories of transformation since the sixteenth century.

Instructor(s): M. Lycett Terms Offered: Not offered 2012–13; will be offered 2013–14 Equivalent Course(s): LACS 28210,ANTH 28210,ENST 28210

## ANTH 38220. Naturalizing Disaster: Nature, Vulnerability, and Social History. 100 Units.

The United Nations International Strategy for Disaster Reduction defines disaster in three crucial terms: hazards, vulnerability, and capacity. While only the first of these can be 'natural' in the way that that term is commonly understood, catastrophic events and processes are frequently represented as exogenous, autonomous, and unpredictable elements of a bio-physical world. Beginning from the theorization of disaster as a property of nature, this seminar examines the political ecology of drought, flood, earthquake, and famine in their historical, economic, and cultural contexts, focusing on community vulnerability and capacity as outcomes of socionatural histories and relations. Drawing on historical and contemporary case studies we will consider a number of dimensions of the dynamic between nature, dislocation, and communities in an increasingly vulnerable world.

Instructor(s): M. Lycett and P. Drake Terms Offered: Spring

Equivalent Course(s): ANTH 28200, ENST 26201

# ANTH 38300. The Practice of Anthropology: Celebrity and Science in Paleoanthropology. 100 Units.

This seminar explores the balance among research, "showbiz" big business, and politics in the careers of Louis, Mary, and Richard Leakey; Alan Walker; Donald Johanson; Jane Goodall; Dian Fossey; and Biruté Galdikas. Information is gathered from films, taped interviews, autobiographies, biographies, pop publications, instructor's anecdotes, and samples of scientific writings.

Instructor(s): R. Tuttle Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 21406,HIPS 21100

# ANTH 38400. Classical Readings in Anthropology: History and Theory of Human Evolution. 100 Units.

This course is a seminar on racial, sexual, and class bias in the classic theoretic writings, autobiographies, and biographies of Darwin, Huxley, Haeckel, Keith, Osborn, Jones, Gregory, Morton, Broom, Black, Dart, Weidenreich, Robinson, Leakey, LeGros-Clark, Schultz, Straus, Hooton, Washburn, Coon, Dobzhansky, Simpson, and Gould.

Instructor(s): R. Tuttle Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 21102, EVOL 38400, HIPS 23600

#### ANTH 38800. Bioarchaeology and the Human Skeleton. 100 Units.

This course is intended to provide students in archaeology with a thorough understanding of bioanthropological and osteological methods used in the interpretation of prehistoric societies by introducing bioanthropological methods and theory. In particular, lab instruction stresses hands-on experience in analyzing the human skeleton, whereas seminar classes integrate bioanthropological theory and application to specific cases throughout the world. Lab and seminar-format class meet weekly.

Instructor(s): M. C. Lozada Terms Offered: Winter Equivalent Course(s): ANTH 28400,BIOS 23247

#### ANTH 40100. The Inka and Aztec States. 100 Units.

This course is an intensive examination of the origins, structure, and meaning of two native states of the ancient Americas: the Inka and the Aztec. Lectures are framed around an examination of theories of state genesis, function, and transformation, with special reference to the economic, institutional, and symbolic bases of indigenous state development. This course is broadly comparative in perspective and considers the structural significance of institutional features that are either common to or unique expressions of these two Native American states. Instructor(s): A. Kolata Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 20100,LACS 20100,LACS 40305

#### ANTH 40205. Knowledge/Value. 100 Units.

This course broadly interrogates conceptual and empirical linkages between epistemology and value. It works on the assumption that we are at a historical moment when epistemology, value and the nature of their articulation are all emergent and at stake. The course is closely coupled to a workshop on "Knowledge / Value" that will be held at the end of spring quarter, which will be a broad consideration of the nature of the fact / value distinction in the context of technoscience, law and finance. Students taking this course will be expected to actively participate in the workshop. Readings will be related to the workshop, but will also include other texts that are foundational in considering questions of Knowledge / Value.

Instructor(s): K. Sunder Rajan

## ANTH 40805. New Perspectives on Vulnerability. 100 Units.

Vulnerability is undergoing re-evaluation in philosophy, the social sciences and the humanities. From having been perceived as a condition from which subjects should be defended, rescued or liberated, vulnerability has increasingly come to be theorized as a position and experience that confronts us with the limits of understanding, empathy, morality and theory. This course will read work that attempts to engage with vulnerability not so much as something to be overcome, but, rather, as a challenge that can guide us towards new ways of thinking about political life and engaging with the world. Course literature includes Giorgio Agamben's work on "bare life", Judith Butler's writing on precarious life, Jacques Derrida's writings on animals, Rosemarie Garland-Thomson's book on staring, Martha Nussbaum's book on "frontiers of justice" and Bryan Turner's work on vulnerability and human rights. (B\*, C\*, D\*; 2\*, 3\*, 4\*)

Instructor(s): D. Kulick Terms Offered: Autumn

Prerequisite(s): Consent required, may be obtained at first class meeting. Graduate students and upper-level undergraduates only.

Equivalent Course(s): GNDR 41160, CHDV 41160

## ANTH 41100. Ethnography of Europe. 100 Units.

This seminar breaks with the tradition of considering Eastern and Western Europe in different courses and with different theoretical questions. Instead we will start with the political and scholarly division of Europe itself as our first conceptual issue, asking how the division was recast by the Cold War and now recast again in light of the Maastricht Treaty and 1989. Interactions and social processes that cross this divide will provide the objects for analysis in the course. We will also consider how any single phenomenon -- e.g. migration or tourism -- is understood in divergent ways depending on the symbolic geography that is assumed by the investigator. Our task will be to analyze the connections between such different conceptualizations, and between sociocultural processes in different corners of the continent. The topics to be taken up include: nationalisms and citizenships; the morality of capitalism; bureaucracy; regionalism and new forms of sovereignty; politics of sex and reproduction; utopias and dystopias -- the fate of state socialism; tourism and xenophobia; comparative mafias; memory, nostalgia and revivals. Students will be asked to lead discussions of topics of their choice and/or to present works-in-progress that analyze one or more of these issues. Instructor(s): S. Gal

## ANTH 41200. Anthropology of History. 100 Units.

Anthropologists have long been concerned with the temporal dimension of human culture and sociality, but, until fairly recently (and with significant exceptions), have rarely gone beyond processual modeling. This has dramatically changed. Anthropologists have played a prominent role in the so-called "historic turn in the social sciences", acknowledging and theorizing the historical subjectivities and historical agency of the ethnographic "other", but also problematizing the historicity of the ethnographic endeavor itself. The last decades have not only seen a proliferation of empirically rich and theoretically sophisticated historical ethnographies, but also a decisive move towards ethnographies of the historical imagination. Taking its point of departure from a concise introduction to the genealogy of the trope of "historicity" in anthropological discourse, this course aims to explore the possibilities of an anthropology of historical consciousness, discourse and praxis – i.e. the ways in which human groups select, represent, give meaning to, and strategically manipulate constructions of the past. In this, our discussion will not just focus on non-western forms of historical knowledge, but include the analysis of western disciplined historiography as a culturally and historically specific form of promulgating conceptions of the past and its relation to the present. Instructor(s): S. Palmié

#### ANTH 41810. Signs and the State. 100 Units.

Relations of communication, as well as coercion, are central though less visible in Weber's famous definition of the state as monopoly of legitimate violence. This course reconsiders the history of the state in connection to the history of signs. Thematic topics (and specific things and sites discussed) include changing semiotic technologies; means; forces and relations of communication (writing, archives, monasteries, books, "the" internet); and specific states (in early historic India and China, early colonial/revolutionary Europe, especially France, Britain, and Atlantic colonies, and selected postcolonial "new nations").

Instructor(s): J. Kelly Terms Offered: Possibly Spring

Equivalent Course(s): ANTH 22710

#### ANTH 41900. Crowds and Publics. 100 Units.

The figure of the unruly crowd, anxiously invoked by social theorists from the late nineteenth century to the mid-twentieth century, was the dystopian alter ego of democratic mass society. Conversely, the figure of the rational mass public, invoked as an ideal from the middle of the twentieth century onwards, relies upon a demonization of the affectively volatile crowd. Oddly, given that they are so intimately related, the two figures of the crowd and the public are rarely explicitly theorized together. This seminar, moving from the early crowd psychology of Le Bon through to contemporary critiques of Habermas, offers an opportunity to redress this lacuna in two ways. On the one hand, we will explore the relationship between affectivity and politics in a wide range of writings. On the other, we will consider the historical relation between theory and social change during a period that stretches from the dawning of mass publicity through the heyday of fascism and on to the diversified terrain of contemporary identity politics. Students will be responsible for classroom presentations as well as a term paper based on the readings.

Instructor(s): W. Mazzarella

#### ANTH 41901. The Crowd. 100 Units.

At the end of the nineteenth century, the figure of the unruly, affect-laden crowd appeared as both the volatile foundation and the dystopian alter ego of the democratic mass society. By the middle of the twentieth century, following the traumatic excesses of communism and fascism in Europe, the crowd largely disappeared from polite sociological analysis – to be replaced by its serene counterpart, the communicatively rational public. At the turn of the twenty-first century, however, the previously demonized crowd has unexpectedly returned, now in the valorized guise of 'the multitude' – in part as a result of a growing sense of the exhaustion of the categories of mainstream liberal politics. This seminar tracks the trajectory of the crowd, from mass to multitude, through a series of classic readings and recent interventions. Students will be responsible for classroom presentations as well as a term paper based on the readings.

Instructor(s): W. Mazzarella

## ANTH 42500. Anthropology of the Afro-Atlantic World. 100 Units.

Although originally pioneered, more than three generations ago, by scholars and critics such as C.L.R. James, Eric Williams, W.E.B. DuBois, or Walter Rodney, conceptions of an "Atlantic World" have only recently come to prominence in Anthropology. In the past decade, however, students of Africa and the Americas have increasingly begun to phrase their inquiries in terms transcending entrenched geographical divisions of labor within the social sciences, aiming to include Africa, the Americas, and, to a certain extent, Europe into a single analytic field. Parts of this course will be devoted to a concise introduction to some of the major theoretical positions within, and controversies surrounding the new "Atlantic" anthropology of Africa and its New World diasporas. After this, we will examine a number of recent monographs and/or major articles exemplifying the promises and pitfalls of theoretical conceptions and methodological procedures that attempt to go beyond mere transregional comparison or linear historical narratives about "African influences", and aim at analytically situating specific ethnographic or historical scenarios within integrated perspectives on an "Afro-Atlantic World". Instructor(s): S. Palmié.

Equivalent Course(s): LACS 42500

#### ANTH 42600. Cultural Politics of Contemporary India. 100 Units.

Structured as a close-reading seminar, this class offers an anthropological immersion in the cultural politics of urban India today. A guiding thread in the readings is the question of the ideologies and somatics of shifting "middle class" formations; and their articulation through violence, gender, consumerism, religion, and technoscience.

Instructor(s): W. Mazzarella Terms Offered: Not offered 2013-14; will be offered 2014-15

Equivalent Course(s): ANTH 25500, SALC 20900, SALC 30900

#### ANTH 42900. Performance and Politics in India. 100 Units.

This seminar considers and pushes beyond such recent instances as the alleged complicity between the televised "Ramayana" and the rise of a violently intolerant Hindu nationalism. We consider the potentials and entailments of various forms of mediation and performance for political action on the subcontinent, from "classical" textual sources, through "folk" traditions and "progressive" dramatic practice, to contemporary skirmishes over "obscenity" in commercial films.

Instructor(s): W. T. S. Mazzarella Terms Offered: Not offered 2012–13; will be offered 2013–14

#### ANTH 43505. Postsocial Society. 100 Units.

What do we mean by the notion "postsocial?" Which processes and developments feed into and sustain a postsocial world? Can these developments be related to a knowledge society, a global society and perhaps a postmodern and transhuman society? Do some of these tendencies affect our notions of agency, meaning, and identity? Issues such as the following are considered: relationships with non-human objects; the impact of technologies on social relations; transhuman arguments; neurosociological and neurophysiological research that has implications for the understanding of human agency and our notion of social action; and arguments that call for a redefinition of core concepts of sociology like that of the face-to-face situation. The course includes theoretical arguments as well as empirical research. Instructor(s): K. Knorr Cetina Terms Offered: Not offered 2013-14

Prerequisite(s): Open to advanced undergraduates

Equivalent Course(s): SOCI 40186

### ANTH 43700. Weber, Veblen and Genealogies of Global Capitalism. 100 Units.

Two intellectual traditions have dominated discussion of the history of capitalism: classical to neo-classical economics, and Marxism. This course searches for other possibilities. It focuses on critical comparative reading of Thorstein Veblen's theory of the late modern "new order" and Max Weber's comparative sociology, but will also read widely among other authors, including Simmel, Sombart, Mahan, Tolstoy and Gandhi. Questions to engage will include: relations between capital, the state, and military force (between means of production and means of coercion); commerce in Asia before European colonialism and the rise of colonial plantations and monopoly trading companies; types of capital, the rise and spread of joint-stock companies, stock markets, and capitalist corporations; the "new order," decolonization and the nation-state.

Instructor(s): J. Kelly

## ANTH 43715. Self-Determination: Theory and Reality. 100 Units.

From the Versailles Conference (1919) through the Bandung Conference (1955) and beyond, global politics has been reorganized by efforts to implement and sustain political sovereignty on the basis of national self-determination. This course examines the theories informing this American-led plan and its real consequences, with attention to India, Algeria, Indo-China, New Zealand, Fiji, and Hawaii. Dilemmas in decolonization, partitions, the consequences of the cold war, and the theory and practice of counterinsurgency are discussed together with unintended consequences of the plan in practice, especially the rise of political armies, NGOs, and diaspora.

Instructor(s): J. Kelly Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 23715

## ANTH 43720. Weber, Bakhtin, Benjamin. 100 Units.

Ideal types? The iron cage? Captured speech? No alibis? Dialectical Images? Charismatic authority? Heteroglossia? Modes of Domination? Seizing the flash? Finished, monological utterances? Conditions of possibility? Strait gates through time? Weber, Bakhtin, and Benjamin provide insights and analytical tools of unsurpassed power. Scholars who use them best have faced and made key decisions about social ontology and social science epistemology, decisions that follow from specific, radical propositions about society and social science made by these theorists and others they engage, starting at least from Immanuel Kant. This course is designed for any student who wants to more clearly understand the arguments of Weber, Bakhtin, and Benjamin, and to understand more broadly the remarkable trajectories of German social theory after Kant. It is designed especially for anyone hoping to use some of their conceptions well in new research. (Yes, Bakhtin is Russian, and cultural theory in Russia and the U.S. too will come up.) Fair warning: this course focuses on four roads out of Kant's liberal apriorism (including culture theory from Herder to Boas and Benedict, as well as Benjamin and the dialectical tradition, Bakhtin's dialogism, and Weber's historical realism). We will spend less time on good examples of current use of Weber's, Bakhtin's, and Benjamin's ideas than on the writings of Weber, Bakhtin, and Benjamin themselves, and their predecessors and interlocutors (including Herder, Hegel, Clausewitz, Marx, Ihering, and Simmel). The premise of the course is that you will do more in your own research with a roadmap than with templates.

Instructor(s): J. Kelly Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 22715

#### ANTH 43800. Approaches to Gender in Anthropology. 100 Units.

This course examines gender as a cultural category in anthropological theory, as well as in everyday life. After reviewing the historical sources of the current concern with women, gender, and sexuality in anthropology and the other social sciences, we critically explore some key controversies (e.g., the relationship between production and reproduction in different sociocultural orders; the links between "public" and "private" in current theories of politics; and the construction of sexualities, nationalities, and citizenship in a globalizing world). Instructor(s): S. Gal Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 25200,GNDR 25201,GNDR 43800

#### ANTH 43805. Nature/Culture. 100 Units.

Exploring the critical intersection between science studies and political ecology, this course interrogates the contemporary politics of "nature." Focusing on recent ethnographies that complicated our understandings of the environment, the seminar examines how conceptual boundaries (e.g., nature, science, culture, global/local) are established or transgressed within specific ecological orders). Instructor(s): J. Masco Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 23805,CHSS 32805,HIPS 26203

## ANTH 44700. Specters of Marx: Matter, Mind, Method. 100 Units.

In this seminar, we will interrogate a certain number of Marxist perspectives, and examine how/whether they can help to shed light on the relationship between ideas, material expressions, and social analysis in a post-Marxist world. While many post-mortems have been sung for Marxism, and many allegations of bankruptcy declared, there is often limited or distant engagement with the core texts from which this critique departs. Moreover, recent critical homage, such as Jacques Derridas /Specters of Marx/, seems to suggest that the force of Marx's spirit lives on not as timeless doctrine, to be sure, but as recombinant traces, orientations, and possibilities embedded in the work of writers influenced by his thought. Without losing sight of the historical logics of capitalism and the state, we will focus on key texts in the Marxist intellectual tradition as they relate to issues of mind, matter, and method. Starting with Marx himself, the seminar will unfold in roughly chronological and thematic progression to track how his seminal ideas have been amplified, transformed, or undermined by later generations of social theorists (Lukács, Gramsci, Adorno, Benjamin, Althusser, Debord, Lefèbvre, Ollman, Sayer, Derrida, Jameson, Eagleton, Zizek). In the process, we will critically reflect on Marxist engagements with ideas of culture, space, time, history, ideology, hegemony, modernity, and politics, to name but a few.

Each of these topics could easily be the focus of a whole course. In this light, the seminar hopes to offer an introduction to ideas and concepts, while striving for depth of analysis. This being said, a modicum of familiarity with the broad horizon of Marxist thinking (e.g. labor, relations of production, commodity, fetishism, value, consciousness, alienation, etc.) will be useful and is strongly recommended. Instructor(s): F. Richard

# ANTH 45300. Modern Readings in Anthropology: Explorations in Oral Narrative (The Folktale) 100 Units.

This course studies the role of storytelling and narrativity in society and culture. Among these are a comparison of folktale traditions, the shift from oral to literate traditions and the impact of writing, the principal schools of analysis of narrative structure and function, and the place of narrative in the disciplines (i.e., law, psychoanalysis, politics, history, philosophy, anthropology).

Instructor(s): J. Fernandez Terms Offered: Spring Equivalent Course(s): ANTH 21305, HCUL 45300

## ANTH 45405. Maverick Markets: Cultural Economy and Cultural Finance. 100 Units.

What are the cultural dimensions of economic and financial institutions and financial action? What social variables influence and shape 'real' markets and market activities? 'If you are so smart, why aren't you rich?' is a question economists have been asked in the past. Why isn't it easy to make money in financial areas even if one knows what economists know about markets, finance and the economy? And why, on the other hand, is it so easy to get rich for some participants? Perhaps the answer is that real markets are complex social and cultural institutions which are quite different from organizations, administrations and the production side of the economy. The course addresses these differences and core dimensions of economic sociology. This course provides an overview over social and cultural variables and patterns that play a role in economic behaviour and specifically in financial markets. We draw on the 'New Economic Sociology' which emerged in the late 70's and early 80's from the work of Harrison White, Marc Granovetter, Viviana Zelizer, Wayne Baker and others. We also draw on recent analysis of the relationship between knowledge, technology and economic and financial institutions and behaviour, and include an emerging body of literature on the financial crisis of 2008-09. The readings examine the historical and structural embeddedness of economic action and institutions, the different constructions and interpretations of money, prices and other dimensions of a market economy, and how a financial economy affects organizations, the art world and other areas.

Instructor(s): K. Knorr Cetina Terms Offered: Winter

Note(s): Open to advanced undergraduates

Equivalent Course(s): SOCI 40172

# ANTH 45600. When Cultures Collide: The Multicultural Challenge in Liberal Democracy. 100 Units.

Coming to terms with diversity in an increasingly multicultural world has become one of the most pressing public policy projects for liberal democracies in the early 21st century. One way to come to terms with diversity is to try to understand the scope and limits of toleration for variety at different national sites where immigration from foreign lands has complicated the cultural landscape. This seminar examines a series of legal and moral questions about the proper response to norm conflict between mainstream populations and cultural minority groups (including old and new immigrants), with special reference to court cases that have arisen in the recent history of the United States. (3\*)

Instructor(s): R. Shweder Terms Offered: Winter

Equivalent Course(s): PSYC 45300, HMRT 35600, GNDR 45600, CHDV 45600

#### ANTH 45615. Displaced nations and the politics of belonging. 100 Units.

While immigration has given rise to cultural hybridity and cosmopolitan forms of belonging, it has also produced diasporic nations and long-distance nationalisms that strive to maintain relationships with real or imagined homelands. This seminar examines what it means to belong to a nation that is not coterminous with a territorial state. It explores both the impact of diasporic nation-making on immigrant subjectivities and on the cultural politics of belonging in receiving states. How, for instance, does deterritorialized nation-making implicate immigrant bodies, histories, and subjectivities? How is the traditionally ethnos-based diasporic nation reconceptualised by considering intersecting queer solidarities or religious nationalisms? How does deterritorialized nation-making complicate ideologies of citizenship and belonging, and how do immigrant-receiving states manage these complications? To explore these issues, we will draw on ethnographic monographs and multidisciplinary theoretical perspectives that critically examine the concepts of the nation, nationalism, deterritorialized nationalism, and citizenship, as they implicate history and memory, the body, sexual and religious solidarities, and multiculturalism. (3)

Instructor(s): G. Embuldeniya Terms Offered: Spring 2013

Equivalent Course(s): CHDV 48415

## ANTH 46020. Archaeology of Modernity. 100 Units.

This course covers the development, themes, practices, and problems of the archaeology of the modern era (post 1450 AD), or what in North America is better known as the subfield of "historical archaeology." Texts and discussions address topics such as the archaeology of colonialism, capitalism, industrialization, and mass consumption. Case studies from plantation archaeology, urban archaeology, and international contexts anchor the discussion, as does a consideration of interdisciplinary methods using texts, artifacts, and oral history. Our goal is to understand the historical trajectory of this peculiar archaeological practice, as well as its contemporary horizon. The overarching question framing the course is: what is modernity and what can archaeology contribute to our understanding of it? Instructor(s): S. Dawdy Terms Offered: Spring

Equivalent Course(s): ANTH 26020

#### ANTH 46505. Non-Industrial Agriculture. 100 Units.

Agriculture is, fundamentally, a human manipulation of the environment, a deliberately maintained successional state designed to serve human needs and desires. In this course, we use the history of non-industrial agriculture to think through some contemporary concerns about environmental change and the sources of our food—including topics such as genetically modified plants, fertilizers, sustainability, and invasive species. Beginning with the origins of agriculture in the early Holocene, we examine several forms of so-called "traditional" agriculture in the tropics and elsewhere, from swidden to intensive cropping. While the course is framed in terms of contemporary concerns, our focus is primarily historical and ethnographic, focusing on the experiences of agriculturalists over the last ten thousand years, including non-industrial farmers today. Students will be expected to produce and present a research paper.

Instructor(s): K. Morrison Terms Offered: Spring Equivalent Course(s): ANTH 26505,ENST 26505

#### ANTH 46700. Colonial Landscapes. 100 Units Units.

This seminar will explore the ways in which both conscious strategies and practices of colonial control and the unintended effects of colonial encounters have altered the built environment which structures lived experience of the colonial situation for both alien agents and indigenous peoples. At the same time, it will seek to discern the ways in which the conjuncture of differing perceptions of the landscape have affected the experience of colonial encounters and transformations of identity. The seminar is especially concerned to explore possibilities for the archaeological investigation of ancient colonial landscapes; and the ancient Western Mediterranean will serve as a primary empirical focus against which general theoretical constructs and research strategies will be evaluated. Topics include the cultural economy of place and space; the guilt environment, habitus and social practice; monumentality, memory and ritual; networks of communication; cadasters and the agrarian landscape; and landscape and the inscription and contestation of colonial hegemony. Instructor(s): M. Dietler

#### ANTH 46800. Ethnoarchaeology and Material Culture. 100 Units.

This seminar explores the theoretical contributions and research methods of the still developing hybrid subfield of anthropology designed to aid archaeological interpretation by undertaking ethnographic research emphasizing the social understanding of material culture. It also attempts to show the potential ethnoarchaeological research to provide a privileged site of conjuncture between the interests of archaeology and cultural anthropology. The course will proceed primarily by means of a close critical examination of selected ethnoarchaeological case studies and readings in material culture theory. The goals of the course include developing: (1) an appreciation of the range of theoretical approaches being applied to the study of material culture and their relative utility for archaeological interpretation, (2) an understanding of the special problems raised by the process of archaeological interpretation and the nature of archaeological data, and (3) a critically astute competence in evaluating, designing, and executing the techniques and research strategies of ethnoarchaeological fieldwork.

Instructor(s): M Dietler

## ANTH 46820. Social Life of Things (And Beyond): Objects, People, Value. 100 Units.

Twenty years ago, Arjun Appadurai published a seminal collection on The Social Life of Things, marking a watershed in anthropological understandings of consumption, circulation, and production, and the role of objects in mediating between cultural sensibilities and economic flows. This work has stimulated a wealth of interest in materiality, and over the years, research has sought to expand the insights of Appadurai's collection to shed greater light on the relationship between mind, matter, and subjectivity. Drawing on these recent developments, this course aims to explore the material dimensions of cultural life and cultural production. As we engage with contemporary and classic writings in cultural anthropology, archaeology, philosophy, and social theory, we will grapple with several key issues: the boundaries between objects and subjects; the agency of persons and things; the relationship between objects and meaning, between experience and imagination; and the production of sociality in the actions/transactions linking people to their material world. The question of value is crucially implicated in these processes, and will require particular attention. And because material transactions are embedded in overlapping fields of power and politics, we will remain attentive to the ways in which objects make/mark/transgress difference, inequalities, and social boundaries. While we will discuss theories of materiality per se, our focus will rest mostly in theorizing how things work in and through concrete social and historical contexts. In this light, ethnographic studies will provide precious resources in helping us outline the logics, terrains, and lineaments of material and cultural production. Indeed, a central goal of this course is to examine how we can mobilize ethnographic insights on object worlds to reframe or expand archaeological inquiries and possibilities, and how, in turn, archaeological imaginations may help to enhance anthropological understandings of materiality.

Instructor(s): F. Richard

#### ANTH 46821. Materiality. 100 Units.

Materiality is on everyone's lips these days. Literatures across the disciplines are full of living bodies and concrete experiences, object biographies, 'theories of things,' a return to 'matter,' 'new' materialisms spun out of 'old' ones... While generative, materiality's ubiquity also betrays a gap, an ambiguity, an absence. For what materiality is exactly remains unsure. Some seem to use it as a descriptive shorthand for the material world. Others as an analytic tending to the materialness of existence. Or as a discourse on it. For others still, it denotes the tangible effects of actions, practice, signs, and thought. Or a framework for unpacking the relationships mediating between people and things... Conjurations abound, yet seldom escape a certain circularity ("materiality studies... materiality?"). The concept has been used to frame a near infinite horizon of topics, from artefacts, of course, to cosmology, faith, finance, and absence, encompassing phenomena both enduring and ephemeral, both there and not-there. In taking on so much, has materiality outlasted its usefulness? What analytic work did it perform in the first place? With these considerations as background, through classic and recent literatures, this seminar will examine the relevance of 'materiality' (epistemologically, conceptually, methodologically) to anthropologies of the contemporary world, at a time when the ontologies of old are dissolving into a bubbling landscape of mixtures, hybridities, and posthumanities, which forces us to rethink basic questions of identity, agency, ethics and politics.

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Instructor(s): F. Richard

#### ANTH 47615. Citationality and Performativity. 100 Units.

This class explores the concept of citationality—the (meta)semiotic form and quality of reflexive interdiscursive practices—and its relationship to various social forms and formations. Particular focus is given to the citational form of performativity and the performativity of citational acts. In the first part of the class we explore issues of reflexivity and (meta)semiosis through Charles Sanders Peirce's semiotic and its reformulation by linguistic anthropology. We then turn to J. L. Austin's discussion of performativity, Jacques Derrida's critique of speech act theory, and Judith Butler's reading of Derrida. The second part of the class explores various forms of citationality, including reported speech; gender performativity; forms of negation and disavowal; mimicry, passing, and pretending; mockery and parody; and commodity and brand fetishes.

Instructor(s): C. Nakassis

### ANTH 47900. Romani Language and Linguistics. 100 Units.

This is a beginning course on the language of the Roms (Gypsies) that is based on the Arli dialect currently in official use in the Republic of Macedonia, with attention also given to dialects of Europe and the United States. An introduction to Romani linguistic history is followed by an outline of Romani grammar based on Macedonian Arli, which serves as the basis of comparison with other dialects. We then read authentic texts and discuss questions of grammar, standardization, and Romani language in society.

Instructor(s): V. Friedman Terms Offered: Winter

Equivalent Course(s): LGLN 27800,ANTH 27700,EEUR 21000,EEUR 31000,LGLN 37800

#### ANTH 48210. Colonial Ecologies. 100 Units.

This seminar explores the historical ecology of European colonial expansion in a comparative framework, concentrating on the production of periphery and the transformation of incorporated societies and environments. In the first half of the quarter, we consider the theoretical frameworks, sources of evidence, and analytical strategies employed by researchers to address the conjunction of environmental and human history in colonial contexts. During the second half of the course, we explore the uses of these varied approaches and lines of evidence in relation to specific cases and trajectories of transformation since the sixteenth century.

Instructor(s): M. Lycett, K. Morrison Terms Offered: Not offered 2013-14; will be offered 2014-15

Equivalent Course(s): ANTH 28210, ENST 28210

#### ANTH 48400. Fieldwork in the Archives. 100 Units.

This is a methods seminar designed for both archaeology and sociocultural graduate students interested in, or already working with, archival materials and original texts. The goal of the course is to develop a tool-kit of epistemological questions and methodological approaches that can aid in understanding how archives are formed, the purposes they serve, their relation to the culture and topic under study, as well as how to search archives effectively and read documents critically. We will survey different types of documents and archives often encountered in fieldwork, and sample approaches taken by historians, anthropologists, and archaeologists from contexts as diverse as the ancient Near East to 1970's Cuba. This seminar will also be driven by the problems and examples that students bring to the discussion. A major outcome will be a research paper that uses original documents from the student's own fieldwork or from locally available archive sources identified during the course. Instructor(s): S. Dawdy

#### ANTH 50500. Commodity Aesthetics: Critical Encounters. 100 Units.

Walter Benjamin and Theodor Adorno's classic writings on the relationship between cultural production, capitalism and aesthetic experience, value and embodiment are back on the anthropological agenda. Why should this be the case? What relevance does the cultural critique of the Frankfurt School hold for contemporary ethnographic projects? Although this seminar in a sense hinges on the work of Benjamin and Adorno, it is above all an attempt to locate the questions they asked in relation to a longer philosophical genealogy: broadly, German critical responses to capitalist modernity and its particular claims on the senses. Readings will include excerpts from key texts by Kant, Hegel, Marx, Lukacs, Weber, Simmel, Balasz, Kracauer, Adorno, and Benjamin.

Instructor(s): W. Mazzarella

#### ANTH 50501. Žižek. 100 Units.

Academic stand-up? Intellectual rock star? Slavoj Žižek's frenetic, eclectic style has often led the theoretical and political seriousness of his project to be eclipsed by his celebrity. Through a series of readings from his most substantial works, this seminar explores the originality of Žižek's attempt (in a poststructuralist, post-socialist world) to bring Lacanian psychoanalysis into conversation with the Kant-Hegel-Marx lineage of theorizing modernity.

Instructor(s): W. Mazzarella

## ANTH 50620. Reading Foucault. 100 Units.

Foucault has long been part of anthropology's canon of interlocutors, an engagement that has often been highly generative (though not without detractors). The recent publication (in French and English) of Foucault's lectures at the *Collège de France*, and other writings and interviews completed before his death, has revealed a different Foucault, who reprises, expands, and refines themes broached earlier in his career. This 'late Foucault' will be the object of this course. Conceived as a reading seminar, the course will consist of weekly substantive engagements with Foucault's writings on ethics, subjectivity, knowledge, politics, and government, with an eye for their resonance with contemporary anthropological thought, *problèmatiques*, and concerns.

Instructor(s): F. Richard

#### ANTH 50700. Seminar: Biopower. 100 Units.

The politics of life in modernity has come to occupy center stage in the human sciences. Studies of modern techniques of governmentality, the naturalizations of transnational neoliberalism, the medicalization of social and historical experience, and the growing hegemony of an interventionist bioscience offer some of the most interesting and challenging models for a contemporary and cosmopolitan anthropology. This seminar will read a number of recent studies in anthropology, science studies, and critical social theory in an effort to better grasp the centrality of the life sciences and biotechnology in modern and contemporary arrangements of power. We will presume that most students will have already read the germinal writings of Georges Canguilhem (The Normal and the Pathological), Michel Foucault (The Birth of the Clinic, Madness and Civilization, Discipline and Punish, "Governmentality"), and Giorgio Agamben (Homo Sacer). These works will not be assigned. (Students who have not read this work are also welcome to enroll, of course.) The materials assigned for the course will first address broad social-theoretical concerns with life and modernist forms of power, then turn to some powerfully analyzed ethnographies of medicine and other institutions that govern life. The third part of the course will turn to science studies and some methodologically innovative approaches to the ethnography of power/knowledge in the "contemporary" moment.

Instructor(s): J. Farquhar

## ANTH 50705. Capital and Biocapital. 100 Units.

This course will explore some recent work on the political economy of the life sciences, exploring what myself and others have called biocapital. But it will do so through a reading of Marx. It will, therefore, be a course in two parts. The first half of the course will involve reading sections of the later Marx (probably some combination of *The Grundrisse* and *Capital*). The second half will involve reading various contemporary works on biocapital, in what Stefan Helmreich has referred to as "Weberian-Marxist" and "Marxist-feminist" veins.

Instructor(s): K. Sunder Rajan

## ANTH 50720. Knowledge/Value: Life Sciences and Information Sciences. 100 Units.

Instructor(s): K. Sunder Rajan

## ANTH 51305. Illness and Subjectivity. 100 Units.

While anthropology and other social sciences have long explored the social and cultural shaping of the self and personhood, many scholars have recently employed the rubric of "subjectivity" to articulate the links between collective phenomena and the subjective lives of individuals. This graduate seminar will examine "subjectivity"—and related concepts—focusing on topics where such ideas have been particularly fruitful: illness, pathology and suffering. We will critically examine the terms "self," "personhood" and "subjectivity"—and their relationship to one another. Additional literatures and topics covered may include: illness and narrative; healing and the self; personhood and new medical technologies. (3, 4\*) Instructor(s): E. Raikhel Terms Offered: Spring

Note(s): Graduate students only. Equivalent Course(s): CHDV 43302

### ANTH 51920. Enigma of the Network. 100 Units.

So much has been written about networks, especially since the advent of the Internet, that it is difficult to know how and where to begin specifying the term. Responding to these circumstances, Bruno Latour writes that "the word network is so ambiguous that we should have abandoned it long ago." Far from abandoning it we have embraced it, and with such vigor that everything and everyone seems to be part of a network. This has rendered the network even more indeterminate while amplifying the enigma of its putatively positive and negative capacities. Some current notions of the network suggest that it is the contemporary fundamental social form, others specify it as a cooperative arrangement of human and nonhuman actors dispersed in space and time and enabled through electronic communication technologies. The network has come to be an organizational imperative, a paradigm of emergence, and an inherent emergent paradigm. This course will explore several different iterations of the network through close readings of texts that celebrate, critique, expand, and think the network. Special attention will be paid to neo-materialist conceptions of the network that problematize its representational register.

Instructor(s): M. Fisch

## ANTH 52100. Seminar: Anthropologies of Body and Experience. 100 Units.

Classically in sociocultural anthropology bodies occupied a default position that could be safely left to the biological sciences. Since the 1980s, however, the combined influence of Foucault, phenomenology, feminism, and medical anthropology has made bodies ("the body," embodiment, bodiliness) a topic in new ways. Once the life of the body has been made an issue for anthropology, many other areas of interest are somewhat recast: consciousness, materialism, subjectivity, agency, discipline, everyday life, practice, and experience all come into play in new ways. No one seminar could accommodate even the majority of work claiming to elucidate these newly framed topics. This course will narrow the field by considering embodiment together with the vexed theoretical and empirical question of experience. Readings (and a few films) will fall into the following broad categories: phenomenology and the critique of phenomenology; representations and their consumption; materialist methods in the interpretation of culture; sexuality and the Freudian body; non-Western theories of bodies and experience; virtual bodies and the senses; bodies (in)visible in ethnography and history. Instructor(s): J. Farguhar

## ANTH 52105. Colloquium: Post-Colonial Africa. Units.

This course explores debates in narrating social, cultural, political and economic change in Africa since 1945. Exploring the recent interest in what historian Frederick Cooper calls "the past of the present," the course will incorporate a variety of disciplinary, methodological and epistemological perspectives. Topics to be explored include: decolonization; the interactions of states and civil society; migration and urbanization; the politics of gender and sexuality; development and globalization; popular culture; health and medicine; and postcolonial theory. Course materials will include historical monographs,, ethnography fiction, memoirs, visual media and films, as well as written and oral primary sources. This course aims to provide students with theoretical and methodological tools to narrate contemporary history. Instructor(s): R. Jean-Baptiste Terms Offered: Spring Equivalent Course(s): HIST 50004, CRES 50004, HMRT 50004

## ANTH 52700. The Anthropology of Security. 100 Units.

One of the foundational concepts of international order is the notion of security. Though this category is rarely defined in practice, it is the basis for war and peace, for the internal management of populations within states, as well as a rhetorical structure that is increasingly used to mobilize resources (economic, military, and ideological). This seminar interrogates the concept of security through the theoretical literature informing state concepts of security, through ethnographic studies of insecurity, and particularly, through an analysis of U.S. power in the post-Cold War period.

Instructor(s): J. Masco

#### ANTH 52710. Publics, Privates, Secrets. 100 Units.

George Simmel once wrote that secrecy was "one of the greatest achievements of humanity" because it added complexity to social life, making every social encounter a complex negotiation over concealment or revelation. This course explores the critical theory of secrecy, and its others -- the public and the private. We will assess how the deployment or withholding of knowledge is constitutive of experiences of self, social life, and state power.

Instructor(s): J. Masco

#### ANTH 52715. Anticipatory Knowledge. 100 Units.

Prognosis, prediction, forecasting, risk, threat – we live at a time of proliferating expert anticipatory futures. This seminar explores how the future is brought into the present as a means of establishing new modes of governance. It focuses on the historical evolution of expert regimes from closed world systems to emerging forms, tracking how notions of danger (marked as crisis, disaster, and catastrophe) index and invade the present. The seminar approaches expert futurism as a vehicle for thinking through complex systems, ethics and knowledge production, and the role of the imaginary in security institutions (crossing techno-scientific, military, financial, environmental, and health domains).

Instructor(s): J. Masco

### ANTH 53320. Urban Emergence. 100 Units.

This course considers the aesthetics, politics, economies, and lived experiences that materialize in relation with thinking the city as a paradigm of emergence and/or an emergent paradigm. As such, it is concerned with the city as a site of generative tension between sedimented practices and nascent phenomena, top-down planning and self-organization, and spatialized morality and temporal becomings. In traversing these themes, it attends to the city as an object, process, and site of reflective theorization. The approach will be both historical and comparative, guided by urban social theory and ethnographic engagements that highlight the sociocultural irreducibility of specific urban conditions, experiences, and questions. Special attention will be given to questions of urban experience and theory vis-à-vis the effects of mass mediation, governmentality, infrastructure, architecture, affective and sensorial registers. This is a graduate seminar but open to undergraduates by permission from the instructor.

Instructor(s): M. Fisch

#### ANTH 53815. Public Affect. 100 Units.

Affect is everywhere in cultural theory today, and public life is supposedly more affective than it ever was before. Affect represents freedom from the prison-house of reason. Affect represents enslavement to sentiment and passion. Affect is emotion. Affect is not emotion, but rather something more corporeal. Affect is intuitive. Affect is deliberate. Affect is transcendent. Affect is socially and historically mediated. How can we begin to grasp this ubiquitous yet enigmatic concept? In this advanced graduate seminar, we will engage with a series of texts that seek, in very different ways, to mobilize affect as a category of social analysis. A continuous conceptual thread will be a consideration of how a notion of affect might serve to mediate between dialectical and immanentist critical traditions. Instructor(s): W. Mazzarella

### ANTH 53820. Mediation, Modernities and Beyond in Japan. 100 Units.

This seminar engages questions surrounding technological mediation and modernity through the particular socio-historical circumstances of Japan. Our focus will be on the relation in modernity between media and new social forms, representation, experiences and subjectivities. We will explore how contemporary emergent forms of technological media challenge some of the dominant theoretical assumptions that have guided discussions concerning the impact of technological media in the twentieth century. Ultimately, our goal will be to imagine new approaches to contemporary Japan as well as other sites of dense technological mediation. While our overall focus will be on Japan, the readings and discussions will speak across geopolitical boundaries.

Instructor(s): M. Fisch

## ANTH 53825. The Anthropology of Sound. 100 Units.

This course is an intensive reading seminar surveying some key works and debates relevant to the anthropological study of sound and sensibility. Students will examine the relation of sound to "modern" modes of reasoning, sentiment and historical consciousness, space and place, the ethics of listening, mechanical reproduction, infrastructure, the phenomenology and politics of voice and silence, the "problem" of noise and the weaponization of sound technologies. The class will involve active listening exercises and an audio production assignment. Readings will include Feld, Schaefer, Corbin, Sterne, Adorno, Kittler, Derrida, Barthes, Hirschkind, Cage, Attali. Instructor(s): J. Chu

ANTH 53900. Modern China: Anthropological and Historical Studies. 100 Units.

This graduate seminar will cover a range of recent studies of (mostly) 20th century China. Though one goal of the course is simply to digest and evaluate the best recent social, cultural and political reporting on Chinese modernities, another goal is to consider questions of method in anthropology and history in the wake of area studies eclecticism. For those not planning to do research in East Asia these readings could serve as a useful case study of theory and method after area studies. Ethnographies will include books by Anagnost, Farquhar, Litzinger, Liu, Rofel, Scheid, Schein, and Yan as well as a number of articles. Historical studies will focus on cultural histories, including some that examine early sources of Chinese traditions (e.g. Kuriyama, Jullien). Because literary and media studies have been influential in Chinese studies, some works in these fields will be covered as well. Instructor(s): F. Farquhar

#### ANTH 54400. Paradoxes of Race. 100 Units.

Notionally grounded in nature, race has a history. We know that racializing discourses and practices are distinctly modern phenomena, intellectually postdating, rather than informing enlightenment ideas about the biological origins of human variation, yet simultaneously growing out of the practical exigencies of the establishment of European domination in colonial scenarios. The historical "artificiality" and ethnographic variability of contemporary projections of embodied racial otherness notwithstanding, ideologies of "race" inform not just patterns of everyday sociality and conflict, but become enshrined in legal and scientific (e.g. medical) policies often explicitly geared towards anti-racist goals. This course examines racializing ideas and practices in several historical and contemporary social and cultural contexts not only with a view towards establishing a genealogy of conceptions of racial difference, but in order to develop a perspective on how to disrupt the social routinization and effectiveness of race as both a discriminatory technos, and a template for self-making. Instructor(s): S. Palmié.

## ANTH 54410. Hybridity. 100 Units.

Ever since the late 1980s when James Clifford discovered that the "pure products" had "gone crazy", and Ulf Hannerz alerted us to the fact that the "world" was "in creolization", notions of "hybridity" and "hybridization" (and their various conceptual relatives such as mestizaje, creolization, syncretism, and so forth) have enjoyed increasing currency in our discipline. Often seen as the results of globalization-induced and medially accelerated Hyperdiffusionism, "hybrids", it seems, are the ubiquitous sign of a postmodern denouement of both "cultures" as "we knew them" (once, when we were "modern"), and the antidote to older anthropological reifications. How ironic then that while the "hybrid" obviously gestures toward what Marilyn Strathern has called "post-plural" conceptions of culture, the languages that are supposed to make it analytically visible often hearken back to the vocabularies of regimes of "breeding" ("hybrid" or "creole"), religious orthodoxies ("syncretism"), systems of racial exclusion and domination ("mestizaje"), or other institutional mechanisms and practices that reproduce and police categorical boundaries - often in order to stabilize particular distributions of power and privilege. This experimental course aims less to scrutinize the analytical utility of the conceptual language these terms appear to put at our disposal, than to probe into the epistemological conditions and taxonomic politics that make "the hybrid" thinkable in the first place, and seemingly "good to think" at the current moment. The central question it poses is: how do we know that something is "hybrid" (or not)? After a very brief initial survey of contemporary "hybridology" and the forms of analysis it seeks to supercede, we will take our departure from Bruno Latour's suggestion that "hybrids" are the inevitable products of practices of categorical "purification". In line with this, we will examine the politics of classificatory discernment, recognition, and naturalization that are productive of both the "purities" and the "hybrids" that appear to stand out, and even ostensibly militate, against them. After a foray into taxonomics and "natural kind" philosophy, we will discuss an array of case studies concerning the maintenance of classificatory infrastructures and categorical boundaries in regard to species, sex, language, race, and distinctions between humans and animals, nature and society, persons and things, and life and death. My hunch is that we might conclude that contemporary "hybridity"-talk is epistemologically problematic and politically troubling because far from destabilizing normalized categorical schemes, it necessarily reinforces precisely those distinctions that make "hybrid anomalies" visible in the first place. However, I remain entirely open to be convinced of the merits of hybridity (or rather: conceptualizations of it that I have, so far, failed to take into account). Instructor(s): S. Palmié

#### ANTH 54800. Uncanny Modernities. 100 Units.

This seminar examines the concept of the "uncanny" as an ethnographic topic. Pursuing the linkages between perception, trauma, and historical memory, this course asks if the modern state form necessarily produces the uncanny as a social effect. We explore this theme through works of Freud, Lacan, Derrida, Benjamin, and Foucault, as well as recent ethnographies that privilege the uncanny in their social analysis.

Instructor(s): J. Masco Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 24800

#### ANTH 54820. Post-Nature. 100 Units.

This graduate seminar explores recent work at the intersection of science studies, anthropology, and political ecology exploring ecological endangerment. Considering the planetary effects of toxicity -- scaled from individual organisms and ecologies to broader issues of climate -- the class considers a natural world radically remade by industrial process. Readings will engage a wide range of current critical theory on the emerging politics of nature -- from endangerment to post-humanism to chemical dependencies to atmospheres. Ultimately, the course will consider the ethnographic terms and theoretical implications of living post-nature. Instructor(s): J. Masco

### ANTH 55400. Utopia. 100 Units.

Some claim that utopian thought was a casualty of the late twentieth century, and that we now live in a post-utopian age. This seminar calls this claim into question by exploring the various ways in which utopianism (and its dark twin, dystopianism) continue to structure our lives. We will ask what utopianism implies as social critique, as imaginary practice, and as political-cultural ideology. Departing from a series of classic utopian texts, we move into detailed engagements with Marxist utopias, modernist architectural utopias, anti-colonial utopias, totalitarian utopias, consumerist utopias and technological and/or virtual utopias.

Instructor(s): J. Masco, W. Mazzarella

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## ANTH 55605. Regulating Il/Licit Flows: State, Territoriality, Law. 100 Units.

This course examines how changing state practices, legal norms and technical innovations have variously shaped the flows of people, goods, capital and information within and beyond the "national order of things." Drawing on anthropological theories and methods, we will explore both the historical genealogies and emergent forms of state sovereignty and territoriality and their relation to the production of "lawful" movements vis-à-vis illicit flows. The course is divided into two parts. Part I introduces students to anthropological approaches for analyzing the different spaces of state regulation (land, the seas, the market, checkpoints, refugee camps) while Part II focuses on the pragmatics and effects of law on the movement of various persons (citizens, refugees, migrants) and commodities (drugs, money, contraband).

Instructor(s): J. Chu

### ANTH 56000. The Preindustrial City. 100 Units.

This seminar will be an intensive examination of the origins and structure of the preindustrial city, with an emphasis on social theories of the city that will take us into the spectrum of preindustrial/industrial/post-industrial cities. Lectures, discussions and participant presentations will be framed around an examination of theories of urban genesis, function, and meaning with speicl reference to the economic, sociological and ideological bases of city development. The seminar is broadly comparative in perspective and will consider the nature of the preindustrial city in a variety of regional and temporal contexts. Although substantial emphasis will be placed on preindustrial urban formations and urban-rural relations, we will also touch upon issues relating to more recent historical and contemporary patterns of urbanism.

Instructor(s): A. Kolata

## ANTH 56010. The City in History. 100 Units.

This seminar will be in intensive examination of the origins, structure and cultural experience of city life. Lectures, discussion and participant presentations will be framed around an examination of theories of urban genesis, function, and meaning with special reference to the economic, sociological and ideological bases of city development. The seminar is broadly comparative in perspective and will consider the nature of the city in a variety of regional and temporal contexts with an emphasis on social theories of the city that will take us into the spectrum of preindustrial/industrial/post-industrial cities. The seminar will consist of initial orienting lectures, discussion of selected texts concerned with social theories of the city, and presentation of research projects by class participants. Instructor(s): A. Kolata

## ANTH 56200. The Human Environment: Ecological Anthropology and Anthropological Ecology. 100 Units.

This graduate seminar is framed around a critical intellectual history of Nature/ Culture concepts from the 18<sup>th</sup> century to the present. We will explore multiple, contradictory strands of social thought regarding Human/Environment interactions, including the concepts of Descartes, Thoreau, Linneaeus, Darwin, and Spencer, as well as a broad range of contemporary analysts. We will be particularly engaged in exploring the tensions between dualistic and monadic conceptions of the Human/ Environment relationship.

Instructor(s): A. Kolata

#### ANTH 56305. Time and Temporality. 100 Units.

How is time understood, experienced, and represented by different human societies? How are we to understand the social significance of ruins, heirlooms, origin stories, science fiction and millenarianism? How can we (re)construct past times? How do imagined futures structure practice? Does modernity represent a rent in the fabric of human time, as it so often claims? How do temporalities affect our research? We will explore these and other questions through a reading of philosophical, anthropological, and archaeological texts on time and temporality, drawing on sources as disperse as Heraclitus, Marx, Benjamin, Munn, Bradley, Koselleck, Gell, and Dietler. While the course may be of special interest to archaeologists and will emphasize how time is spatialized and materialized, the discussion and readings will be broad and interdisciplinary. Instructor(s): S. Dawdy

#### ANTH 56500. The Archaeology of Colonialism. 100 Units.

This seminar is a comparative exploration of archaeological approaches to colonial encounters. It employs temporally and geographically diverse case studies from the archaeological and historical literature situated within a critical discussion of colonial and postcolonial theory. The course seeks to evaluate the potential contribution of archaeology both in providing a unique window of access to precapitalist forms of colonial interaction and imperial domination and in augmenting historical studies of the expansion of the European world-system. Methodological strategies, problems, and limitations are also explored. Instructor(s): M. Dietler

## ANTH 56515. The Underworld: Archaeology of Crime and Informal Economies. 100 Units.

Archaeology often claims to substantiate undocumented histories. In such a view, almost any kind of archaeology performs a type of forensics of informal social and economic processes. We will take an epistemological look at the most literal examples – archaeological interpretations of criminal acts and informal and/or illegal economic practices. Readings will span from classic foundations of economic anthropology and economic archaeology to the artifactual evidence used to interpret felicide, smuggling, prostitution, and contemporary war crimes. The central questions around which this student-led seminar will focus are: what are the evidentiary logics of archaeology?; what is at stake in parsing social and economic practices into 'formal' and 'informal' domains?; and what are the challenges and potentials of doing an archaeology of practices intended to leave no trace? Instructor(s): S. Dawdy

## ANTH 57701. Linguistic Anthropology Seminar: Boundaries, Borders, Contacts: Processes of Differentiation. 100 Units.

The question of boundaries - - between languages, cultures, ethnic groups, institutions, disciplines, territories - - has been a central one in anthropological theorizing. Herderian assumptions equating supposedly grounded languages with territorially delimited culture (on the implicit model of nation-states) were foundational for the discipline. Noteworthy is the persistence of such terms as analysis despite repeated scholarly attacks on the notion of groundedness in language and culture, and attacks on the related assumption of homogeneity within supposed boundaries. We have recently witnessed yet another revival (and critique) of terms meant to recognize the regularity with which boundaries are breached: "hybridity," "syncretism," "creolization," "crossings," "borderlands," "global/local," and "frontiers." This course examines critically the current use of such terms. The goal of the course is to survey and develop the semiotic, sociolinguistic and institutional processes - - for instance of differentiation, stereotypy, commensuration, and standardization - - that create and regiment cultural difference, and that are often simply glossed (and glossed over) when spatial metaphors are applied to culture, language and space itself. A focus on language ideologies and linguistic differentiation will be our conceptual starting

Instructor(s): S. Gal

# ANTH 57710. Linguistic Anthropology Seminar: Translation and Textual Circulation: Communicative Aspects of Transnational Processes. 100 Units.

This seminar investigates communicative dimensions of globalization. How are movements of people, objects and texts mediated by semiotic processes and by linguistic practices. Some questions concern form: How are texts and text artifacts transformed in the process of moving across national spaces regimented by different standard languages? How does this movement change the national spaces? Is "movement" the apt characterization of this process, or rather imitation, citation, iteration? The political economy of literary and technical translation in this conventional sense is our starting point in the seminar. But denotational codes (named languages) are only one of the sites at which various transformations occur in the apparent movements of texts and practices. The goal of the seminar is to examine "translation" as also a pragmatic process, worked across systems of indexicality, across differently situated discursive formations. Ethnography itself has often been characterized as a discipline of translation in this sense. How and when are commensurabilities established not only between languages but among different registers and discourses (e.g. medical to legal to commonsense)? What social roles and institutions create and mediate commensurabilities or ruptures in specific ethnographic and political contexts? How can we study the nodes of control and conflict? Of censorship, stoppage and obstruction? More generally, what limits are imposed on cultural forms as the condition of their circulation across various types of institutions? How are cultural forms – texts, practices – made transportable and transposable? When are boundaries between cultural, ethnic, linguistic, social units created, contested or erased through such transposition. Starting with notions of entextualization, recontextualization, language ideology and interdiscursivity as developed in recent linguistic anthropology, the seminar aims to read critically across current ethnographic literature on topics such as: "cultural translation," "cultures of circulation," "publics," "translation studies," "trading zones," and "semiotics of global flows."

Instructor(s): S. Gal

# ANTH 57715. Linguistic Anthropology Seminar: Narrative. 100 Units.

The goal is to find and analyze narratives in ethnographic materials: what counts as narratives, how they are (sometimes) institutionalized, their effects on social organizations and their implications for various cultural processes such as, for instance, memory and tradition, political conflict, career building, nation-making, regionalization, health-maintenance, among others. We will try various modes of narrative analysis to see how they work and why. In the first few weeks, we review some philosophical questions about time and its experience via linguistic/ textual representations, then move to some literary and theory-of-history opinions/ traditions, including the question of emergent story practices and their cultural categorizations. Most of the course will focus on recognizing and analyzing various genres or their fragments in fieldnotes and interviews, in interactions, mass media products and in the ethnographic accounts of others. Seminar participants will present their own field materials or critically read ethnographies focused on narratives (or ones that include such but do not highlight them) and discuss how storytelling-in-action and in interaction operates: e.g. how it might orient and align speakers and produce the textures of social life.

Instructor(s): S. Gal

# ANTH 57718. Linguistic Anthropology Seminar: Politics of Translation: Circulations and Commensurations Across Social Domains. 100 Units.

Ethnography has long been considered the "translation" of cultures, but the process of translation has not often been closely examined in anthropology. Since the middle of the 20<sup>th</sup> century it has been problematized by philosophy of science, in which incommensurability between "paradigms" was thought to block translation across them, undermining the possibility of progress. Similarly, the politics of multiculturalism in many parts of the globe has revived Herderian notions of cultures as "monads" between which there is only miscommunication, apparently undermining the founding assumptions of liberalism. Cultural, ethical, epistemic and linguistic "relativity" were the labels for discussing such matters in earlier decades. Today, these concepts are increasingly problematic as anthropology engages with the ubiquitous facts of circulation: in addition to objects, materials and commodities, financial instruments, discourses, media, methods, theories, political movements, institutional arrangements all seem to "travel" across spacetime, seeming to contradict assumptions of cultural incommensurability. This course asks: How (if at all) do cultural "objects" come to be measured by similar metrics (i.e. commensurated), and/or equated in meaning (i.e. translated) so that they are taken up, recognized, reanimated, imitated in diverse locations and thus seem to travel and circulate. We start with the hypothesis that there are semiotic processes and practices by which translation and commensuration are achieved, fought over, and/or rejected. What are they? Especially: How are the social worlds, "objects," personae and sites of commensuration/translation themselves transformed by these processes. The strategy of the course is to start with practices of linguistic translation, as these are among the mediators of virtually all other commensuration processes. We explore how far linguistic and semiotic practices at language boundaries in specific sociohistorical and ideological circumstances can help illuminate other forms of commensuration and boundary work. What are the implications of these processes for the practice of anthropology? Instructor(s): S. Gal

# ANTH 58200. Material Culture and Consumption: Embodied Material Culture -- Food, Drink, and Drugs in History. 100 Units.

The Material Culture and Consumption seminar is designed to explore a series of current major research frontiers in the understanding of material culture. This domain of inquiry constitutes an exciting new convergence of interests among the fields of archaeology, cultural anthropology, history, and sociology; hence, the seminar seeks to explore the intersection of novel theoretical developments and empirical research among all these fields. The theme for this year's seminar is "Embodied Material Culture": that is, objects which are produced specifically for consumption by ingestion into the human body. Readings and discussion will center around works that grapple with the social and cultural understanding of food, alcohol, and drugs in ancient and modern contexts. Their close association with the body and the senses, as well as their nutritive and psychoactive properties, make these forms of material culture an especially salient, symbolically charged form of "social fact" and make the study of their consumption a particularly revealing key to social relations, cultural concepts, and articulations of the domestic and political economies.

Instructor(s): M. Dietler

# ANTH 58510. Anthropology of Space/Place/Landscape. 100 Units.

Materiality has emerged as a fertile interest in anthropology and other social sciences. Within this broad conceptual umbrella, space, place, and landscape have become critical lenses for analyzing and interpreting people's engagement with their physical surroundings. Once an inert backdrop to social life, a mere epiphenomenon, the material world is now acknowledged as a generative medium and terrain of cultural production: at once socially produced and framing sociality, shaping and constraining human possibilities, both by and against design... This course concerns itself with these articulations: 1) the spatial production of social worlds, 2) its expressions in different cultural and historical settings, and 3) its trails of ambiguous effects. Drawing on several fields, anthropology and geography chiefly, but also art history, architecture, philosophy, and social theory, we will explore how the triad of space/place/landscape works on, in, and through different social worlds and its role in the making of social experience, perception, and imagination. We will also reflect on how spatial formations frequently elude the very social projects that have birthed them. The objective of the course is to provide you with a foundation in contemporary spatial thought, which can be creatively applied to questions of spatiality in your own research setting.

Instructor(s): F. Richard Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 28510

#### ANTH 58515. Style. 100 Units.

Style is a paradoxical concept that seemingly defies description and interpretation. It is shared and individual, timeless yet impossibly mutable. Style also inspires and limits, defining traditional and novel forms of human expression. This course considers how the different stakes of representation are worked through the analytic of style. Surveying theoretical perspectives across several disciplines -- anthropology, art history, architecture, and technology studies -- this course reconsiders the conceptual basis of style and its applications to ethnographic and archaeological cases while attempting an exploration of its cognitive and affective dimensions.

Instructor(s): A. Yao

### ANTH 58600. Social Theory of the City. 100 Units.

This graduate seminar explores various historical, sociological and anthropological theories of cities. The course analyzes major theoretical frameworks concerned with urban forms, institutions and experience as well as particular instances of city development from pre-modern to contemporary periods. The seminar will consist of initial orienting lectures, discussion of selected texts concerned with social theories of the city, and presentation of research projects by class participants. Instructor(s): A. Kolata

# ANTH 58702. Archaeologies of Political Life. 100 Units.

This seminar examines how archaeologists have approached political life in the past forty years. Its aim is to question the categories through which political worlds are often studied (beginning with such unwieldy terms as 'states,' 'chiefdoms,' 'complexity,' etc.) and complicate analyses of politics in the past. Rather than relying on concepts that already predetermine the outcome of political functioning, we will read key texts in anthropology and political theory (on sovereignty, domination, legitimacy, political economy, governance, ideology, hegemony, subjectivity, anarchy) to dissect the foundations and operations of power, expose its cultural logics, and explore the processes behind the categories. Some of the questions that will guide our discussions include: How do politics work in both past and present? Through what channels and modalities? With what effects (anticipated or not)? And what role does the material world play in mediating these relations? Each week will pair theoretical readings with case-studies drawn from different parts of the world and from different moments in history. Through this seminar, students will gain familiarity with classic archaeological thinking on power and critical perspectives steering contemporary studies of past politics.

Instructor(s): F. Richard

Equivalent Course(s): ANTH 28702

# ANTH 59500. Archaeology Laboratory Practicum. 100 Units.

This hands-on lab practicum course exposes students to various stages of artifact processing on a collection from a recently excavated site (e.g., washing, sorting, flotation, identification, data entry, analysis, report preparation, curation). The primary requirement is that students commit to a minimum of nine hours of lab work per week, with tasks assigned according to immediate project needs.

Instructor(s): F. Richard Terms Offered: Autumn

Prerequisite(s): Consent of instructor

Note(s): Undergraduates may take this course only once for credit.

Equivalent Course(s): ANTH 29500



# DEPARTMENT OF COMPARATIVE HUMAN DEVELOPMENT

Chair

Richard P. Taub

Professors

Jennifer Cole

Susan Goldin-Meadow

Sydney Hans

Don Kulick

Susan Levine

John A. Lucy

Dario Maestripieri

Martha K. McClintock

Richard Shweder

Margaret Beale Spencer

Nancy Lou Stein

Associate Professors

William Goldstein

Guanglei Hong

Micere Keels

Jill Mateo

Assistant Professors

Eugene Raikhel

Lindsey Richland

Faculty Associates

Kathleen Cagney

Judith Farquhar

Salikoko Mufwene

Linda Waite

Amanda Woodward

**Emeritus Faculty** 

R. Darrell Bock

Mihaly Csikszentmihalyi

Irene Elkin

Ray Fogelson

Eugene T. Gendlin

Philip W. Jackson

David E. Orlinsky

Susan Stodolsky

(sociologist), and Ralph Tyler (educator), to focus on the study of the individual within context. Its faculty believes that social life is too complex to be left within any one discipline. Consequently, the department brings together anthropologists, psychologists, sociologists, biologists, and applied statisticians whose work extends disciplinary boundaries and synthesizes theories, insights, questions, and methods from across the social science spectrum.

Some current research programs include the impact of globalization on family relationships and the transition to adulthood, the relation of language to thought, the health consequences of social experiences, cultural politics of gender and sexual identity, models of biopsychological development, the nature of the self, the ethical and moral issues raised by increasingly multicultural societies, variations in the learning process in educational settings, and methods for investigating causality.

Each student is given faculty assistance in (1) planning a program of courses and training; (2) fulfilling the Divisional and Departmental steps leading to the Ph.D. degree; (3) obtaining a professional position after graduation. Each entering student is assigned to a faculty advisor who will serve until the student chooses a research advisor. The student should also consult with the Comparative Human Development Secretary for information regarding procedures.

# COURSES

For more recently updated course plans, please see the quarterly *Time Schedules* and the Comparative Human Development website (http://humdev.uchicago.edu).

# **PROGRAMS**

Students in consultation with faculty advisors develop their program of study appropriate to their professional goals and research interests. The department's central areas of study are described below.

#### COMPARATIVE BEHAVIORAL BIOLOGY

This program investigates behavioral processes at the social, psychological and biological levels of organization in both humans and nonhuman animals. Current research is concentrated in three main areas. In the area of behavioral and reproductive endocrinology, research conducted with rodents and humans investigates the social and behavioral control of fertility and reproduction and the role of hormone behavior interactions in development throughout the life span. Specific topics of interest include mechanisms and function of estrous and menstrual synchrony, facultative adjustment of sex ratios, pheromonal communication, reproductive senescence, psychosomatics in obstetrics and gynecology, and the behavioral modulation of the immune function. In the area of comparative development, we use nonhuman primate and rodent models of parenting and development to investigate social, emotional, and endocrine aspects of mother infant attachment and infant development, with particular emphasis on interindividual variability both within and outside the normal range. Other topics of interest include affiliative and aggressive behavior, mating strategies, nonverbal communication and social cognition in rodents, primates and humans. In the area of social neuroscience, one topic of interest is evaluative processes, e.g., affective,

attitudinal, or emotional operations by which individuals discriminate hostile from hospitable environments. Of interest as well is in the role of social and autonomic factors in individuals endocrine and cellular immune response to stress and illness vulnerability. Throughout, the research approach is characterized by the integration of social and biological levels of analysis.

CHDV 30901	Biopsychology of Sex Differences	100
CHDV 32201/42201	Developmental Biopsychology *	100
CHDV 34300	Primate Behavior and Ecology *	100
CHDV 34800	Kinship and Social Systems *	100
CHDV 37500	Research Seminar in Animal Behavior I **	100
CHDV 37502	Research Seminar in Animal Behavior II **	100
CHDV 37503	Research Seminar in Animal Behavior III **	100
CHDV 37801	Evolutionary Psychology *	100
PSYC 48001	Mind and Biology Proseminar I (=CHDV 38000) **	000
PSYC 48002	Mind and Biology Proseminar II (=CHDV 38100) **	000
PSYC 48003	Mind and Biology Proseminar III (=CHDV 38200) **	100
CHDV 48414	Evolution of Human Development *	100

<sup>(\*)</sup> Satisfies the breadth requirement.

#### SOCIETY, INSTITUTIONS, CULTURE AND THE LIFE COURSE

The Department of Comparative Human Development has a long tradition of examining "development" not just in childhood, but over the entire life course. A basic premise of our approach is that how people change over their lives is shaped by, and also shapes, social institutions, cultural practices, material circumstances and biological potential. We are also interested in how normative models of human development become institutionalized, materialized, and potentially contested as they travel across different cultural or economic settings. Some current areas of research include the influence of families, peers, neighborhoods and economic inequality on individual trajectories and outcomes; the role of youth and generational change in contemporary social life; and how early childhood exposure to social and psychological deprivation contributes to subsequent vulnerability or resilience. A particular strength of the department is the study of how children learn in school settings and the role of gesture in learning and cognition. Faculty focused on education have unique expertise in the quantitative analysis of large data sets to distinguish the cross-cutting effects of age, cohort, and institutional context. We also seek to develop new experimental and qualitative methods that assess the relationship between cognitive competence and interaction in instructional settings. Faculty and students interested in life-course issues also engage in cross-cultural research in places as diverse as Madagascar, Mexico, India and Papua New Guinea.

<sup>(\*\*)</sup> All three quarters of sequence must be taken in order to receive a letter grade.

CHDV 30304	Urban Neighborhoods and Urban Schools: Community	100
	Economic Opportunity and the Schools *	
CHDV 31000	Cultural Psychology *	100
CHDV 31901	Language, Culture, and Thought *	100
CHDV 32100	Culture, Power, Subjectivity	100
CHDV 32101	Culture and Power, Part II: Discourse and Performativity	100
CHDV 35202 Demography of Aging and the Life Course		100
CHDV 40207	Development in Adolescents *	100
CHDV 40306	Academic and Behavior Gender Gaps Along the Pathway to Degree Attainment	100
CHDV 41160	New Perspectives on Vulnerability *	100
CHDV 42350 Develo	opment Over Life Course *	100
CHDV 48414	Evolution of Human Development *	100

<sup>(\*)</sup> Satisfies the breadth requirement.

# Cultural Psychology, Psychological Anthropology, Immigration Studies

Coming to terms with transnational migration and defining the scope and limits of tolerance for ethnic, religious and cultural diversity in North America and Europe has become one of the most pressing concerns for states and citizens in liberal democracies in the 21st century. The Department of Comparative Human Development has long been a leading center for training in psychological anthropology, cultural psychology, culture and mental health, and the cross cultural study of human development, with special attention to what the anthropologist Clifford Geertz once called "the force and durability of ties of religion, language, custom, locality, race, and descent in human affairs." Faculty and students investigate ethnic and cultural sources of diversity in emotional and bodily functioning, conceptions of self and subjectivity, sexuality and gender identity, moral evaluation, and social cognition. We are also concerned with the social and political production and management of social differences as well as the conflicts that arise in the context of contemporary migration. Ethnographic field work both in the United States and abroad is an important component of this program, although students and faculty use multiple methods (qualitative and quantitative, observational, clinical and experimental) to understand the similarities and differences in psychological functioning across human populations. The program encourages the comparative social and cultural analysis of what people know, think, feel, desire and value in India, Japan, China, Russia, Africa and the Middle East, as well as research on the institutions, ideologies and economic circumstances that shape the experience of minorities in places ranging from Norway to France to the United States.

CHDV 30117	Transnational Kinship, Intimacy and Migration	100
CHDV 31000	Cultural Psychology *	100

CHDV 31901	Language, Culture, and Thought *	100
CHDV 32100	Culture, Power, Subjectivity *	100
CHDV 32101	Culture and Power, Part II: Discourse and Performativity *	100
CHDV 32212	Love, Capital and Conjugality: Africa and India in Comparative Perspective	100
CHDV 33302	Disordered States	100
CHDV 41160	New Perspectives on Vulnerability *	100
CHDV 42214	Ethnographic Writing	100
CHDV 43204	Medical Anthropology *	100
CHDV 43302	Illness and Subjectivity *	100
CHDV 43600	Processes of Judgement and Decision Making	100
CHDV 44700	Seminar: Topics in Judgement and Decision Making	100
CHDV 45600	When Cultures Collide: The Multicultural Challenge in	100
	Liberal Democracy *	
CHDV 45601	Moral Development and Comparative Ethics	100
CHDV 48415	Displaced nations and the politics of belonging	100

CHDV 50036 Sem: Honor

#### Health, Vulnerability and Culture

The Department of Comparative Human Development maintains a tradition of examining health, illness and vulnerability from a variety of social science perspectives. We understand health, illness and vulnerability as experiences that are deeply shaped by inter-related social, political-economic, and psychobiological processes. We are also committed to the idea that how human beings experience distress is inextricable from the ways in which we recognize, represent and respond to it. We are thus equally concerned with the biosocial mechanisms through which health, illness and vulnerability become embodied in particular persons, as we are with the cultural and linguistic processes through which concepts such as "health," "illness" and "vulnerability" are produced, enacted, institutionalized and contested. A particular strength of our program is the study of mental health and illness and of psychiatry as a social institution. Current areas of research include including culture and mental health; the comparative study of medical and healing systems; psychopathology and resilience across the life course; the psychosocial determinants of malignant and infectious disease; disability and vulnerability as conditions of ethical and political life; colonialism and traumatic social memory; the social consequences of the neurosciences and genetics; and illness, subjectivity and embodiment. Faculty and students employ a range of ethnographic, experimental and epidemiological methods, and have carried out fieldwork in settings including China, France, India, Madagascar, Russia, Scandinavia and the United States.

<sup>(\*)</sup> Satisfies the breadth requirement.

CHDV 31800	Modern Psychotherapies *	100
CHDV 32404 Romantic Love: Cultural & Psychological Perspectives *		
CHDV 38701	Social and Cultural Foundations of Mental Health	100
CHDV 40110	Color, Ethnicity, Cultural Context, and Human Vulnerability	100
CHDV 41160	New Perspectives on Vulnerability *	100
CHDV 42700 Theories of the Self *		
CHDV 43204	Medical Anthropology *	100
CHDV 43302	Illness and Subjectivity *	100

<sup>(\*)</sup> Satisfies the breadth requirement.

# LANGUAGE AND COMMUNICATION IN THOUGHT AND INTERACTION

This program area supports research and training on how language and other forms of social communication support and shape individual thought and social interaction. The program encompasses three intersecting areas. First, it compares communicative modalities across species, especially among the social mammals, with particular attention to the role played by language in human evolution and development by enabling the emergence of self, culture, and conceptual thought. Second, it compares linguistic and other communicative traditions across human societies with respect to their effects on thought and interaction, with particular attention to the impact of language diversity, multilingualism, the interplay of verbal and nonverbal communication, and language socialization. And third, it compares both within and across societies the various specialized structures and discursive uses of language deployed within specialized institutional settings and ideological regimes such as education, therapy, science, religion, politics, etc. Across all three areas, there is an emphasis on bringing together a firm grounding in the formal analysis of the communicative modalities with substantive understanding of the psychological and social fields within which they operate.

CHDV 23900	Introduction to Language Development *	100
CHDV 31901	Language, Culture, and Thought *	100
CHDV 33410 Gesture and Discourse *		100
CHDV 45501	Cognition and Education *	100

<sup>(\*)</sup> Satisfies the breadth requirement.

#### Methods in Human Development Research

Research on human development over the life span and across social and cultural contexts thrives on multiple theoretical perspectives. This research requires creation and improvement of a wide range of research methods appropriately selected for and tailored to specific human development problems. Faculty in the department employ research methods that span the full range from primarily qualitative to primarily quantitative and to strategic mix of both. Across all the substantive

domains in Comparative Human Development, theoretical understanding is greatly advanced by methodology; therefore the Department pays serious attention to research design, data collection, analytic strategies, and presentation, evaluation, and interpretations of evidence. The Department has contributed some of the most influential work on psychological scaling on the basis of the item response theory (IRT), multivariate statistical methods, analysis of qualitative data, modeling of human growth, and methods for cross-cultural analysis. Current research interests include (a) assessment of individual growth and change in important domains of development that are often intertwined, (b) examination and measurement of the structure, process, and quality of individual and group experiences in institutionalized settings such as families, schools, clinics, and neighborhoods, and (c) evaluation of the impact of societal changes or interventions on human development via changes in individual and group experiences, with particular interest in the heterogeneity of growth, process, and impact across demographic sub-populations and across social cultural contexts.

CHDV 30005	Statistical Methods of Research-2	100
CHDV 30101	Applied Statistics in Human Development Research	100
CHDV 30102	Causal Inference	100
CHDV 32411	Mediation, Moderation, and Spillover Effects	100
CHDV 39301	Qualitative Research Methods	100
SOCI 40112	Ethnographic Methods	100
CHDV 42214	Ethnographic Writing	100
CHDV 43248	Research Methods in Behavior and Development	100
CHDV 45700	Urban Field Research	100

#### WORKSHOPS

The University's Council on Advanced Studies oversees a series of interdisciplinary workshops, each of which reflects the research interests of a particular group of faculty members and graduate students. The following workshops are sponsored by faculty members and organized by graduate students from the Department of Comparative Human Development (often in collaboration with faculty and students from other departments): Comparative Behavioral Biology; Self and Subjectivity; Education. A full list of workshops is available at http://cas.uchicago.edu/.

# REQUIREMENTS

Every student is required to take the following courses for a quality grade:

- CHDV 40000 HD Concepts
- Six CHD area courses (one in each area):
  - Comparative Behavioral Biology
  - Society, Institutions, Culture and the Life Course
  - Cultural Psychology, Psychological Anthropology, Immigration Studies
  - Health, Vulnerability and Culture

- Language and Communication in Thought and Interaction
- Methods in Human Development Research
- Intermediate Statistics from among the following:

CHDV 30101	Applied Statistics in Human Development Research	100
PPHA 31000	Statistics for Public Policy I (**)	100
PPHA 31100	Statistics for Public Policy II (**)	100
STAT 22000	Statistical Methods and Applications	100

- (\*\*) Both courses must be taken in sequence to fulfill requirement
- CHDV 42401 Trial Research in Human Development I and CHDV 42402 Trial Research in Human Development II. May be taken pass/fail.
- Two additional CHD courses in chosen area of specialization. If Methods in Human Development Research is your area of specialization, you must choose an additional area of specialization to take two courses in.

Students are not required to complete all these requirements by the end of their second year. However, they must have five quality grades by the end of spring of their first year, and ten quality grades by the end of the second year. On average a graduate student should take at least two courses for quality grades in each quarter of their first two years.

In addition, students will participate in elective courses and workshops in the department, and the University in consultation with their advisors. CHDV 40000 HD Concepts will introduce students to the history, theoretical bases, and concepts of the field of human development, and to the major areas of inquiry in the Department of Comparative Human Development. This is taken during the fall quarter of the first or second year.

The trial research seminars (CHDV 42401 Trial Research in Human Development - I and CHDV 42402 Trial Research in Human Development - II) will launch students into their research projects and will guide them from the beginning to the completion of those projects. The trial research seminar is taken in the spring quarter of the first year and the fall quarter of the second year. Trial research papers are due by spring quarter of the second year.

A grade of B or better is required to satisfy the requirements of these courses. Students are expected to maintain an average of B+ or better. A student who can demonstrate basic competence in the core curricular areas may petition the faculty through the Chair's office to place into an advanced course in the same area. A well qualified student may place out of intermediate statistics by examination provided by the instructor of the statistics course. If a student can demonstrate that they are unable to take any of the designated Methods courses, they may petition through the Chair's office to have an equally relevant and rigorous course from another department count towards the requirement.

#### TRIAL RESEARCH

All students are required to enroll in a trial research seminar in the spring quarter of the first year and the autumn quarter of the second year. The trial research project must be completed and formally approved by the faculty during the spring

quarter of the student's second year. Students are expected to report regularly on the progress of their research to the trial research seminars. The trial research is carried out under the direction of the research advisor and is read by one other faculty member.

#### **EVALUATIONS**

All students are evaluated each year in the program. To be considered in good standing and for continuation of financial aid, first and second year students must have earned at minimum five quality grades (B or better) over autumn and winter quarters by the time of the spring review, with satisfactory spring grades expected to follow. The evaluation at the end of the second year is particularly important, as it determines whether a student will be permitted to conduct dissertation research.

#### **ADVISORS**

Each student is assigned a faculty member at the beginning of the first year of study to serve as a research advisor. Students may change research advisors as their needs and interests evolve, but students are expected to be affiliated with one or more research advisors throughout their graduate careers.

# Information on How to Apply

The application process for admission and financial aid for all Social Sciences graduate programs is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online at: https://applyssd.uchicago.edu/apply/

Questions pertaining to admissions and aid should be directed to admissions@ssd.uchicago.edu or (773) 702-8415. Most of the documents needed for the application can be uploaded through the online application. Any additional correspondence and materials sent in support of applications should be mailed to:

The University of Chicago Division of the Social Sciences Admissions Office, Foster 105 1130 East 59th Street

### COMPARATIVE HUMAN DEVELOPMENT COURSES

#### CHDV 30005. Statistical Methods of Research-2. 100 Units.

The course covers logistic regression, time series analysis, and network analysis.

Instructor(s): K. Yamaguchi Terms Offered: Spring

Prerequisite(s): SOCI 30004

Equivalent Course(s): SOCI 30005

# CHDV 30101. Applied Statistics in Human Development Research. 100 Units.

This course provides an introduction to quantitative methods of inquiry and a foundation for more advanced courses in applied statistics for students in social sciences with a focus on human development research. The course covers univariate and bivariate descriptive statistics, an introduction to statistical inference, t test, two-way contingency table, analysis of variance, and regression. All statistical concepts and methods will be illustrated with application studies in which we will consider the research questions, study design, analytical choices, validity of inferences, and reports of findings. The examples include (1) examining the relationship between home environment and child development and (2) evaluating the effectiveness of class size reduction for promoting student learning. At the end of the course, students should be able to define and use the descriptive and inferential statistics taught in this course to analyze data and to interpret the analytical results. Students will learn to use the SPSS software. No prior knowledge in statistics is assumed. (M) Instructor(s): G. Hong Terms Offered: Spring

Prerequisite(s): High school algebra and probability are the only mathematical prerequisites.

Note(s): Not offered 2012-13

Equivalent Course(s): CHDV 20101, HDCP 56050

#### CHDV 30102. Causal Inference, 100 Units.

This course is designed for graduate students and advanced undergraduate students from social sciences, health science, public policy, and social services administration who will be or are currently involved in quantitative research and are interested in studying causality. The course begins by introducing Rubin's causal model. A major emphasis will be placed on conceptualizing causal questions including intent-to-treat effect, differential treatment effect, mediated treatment effect, and cumulative treatment effect. In addition to comparing alternative experimental, quasi-experimental, and non-experimental designs, we will clarify the assumptions under which a causal effect can be identified and estimated from nonexperimental data. Students will become familiar with causal inference techniques suitable for evaluating binary treatments, concurrent multi-valued treatments, continuous treatments, or time-varying treatments in quasi-experimental or nonexperimental data. These include propensity score matching and stratification, inverse-probability-of-treatment weighting (IPTW) and marginal mean weighting through stratification (MMW-S), regression discontinuity design, and the instrumental variable (IV) method. The course is aimed at equipping students with preliminary knowledge and skills necessary for appraising and conducting causal comparative studies. (M)

Instructor(s): G. Hong Terms Offered: Autumn

Prerequisite(s): Intermediate Statistics

Note(s): Graduate course open to advanced undergraduates. Not offered in the

2013-2014 academic year.

Equivalent Course(s): STAT 31900

# CHDV 30117. Transnational Kinship, Intimacy and Migration. 100 Units.

Across the world, people are on the move like never before: migration across national boundaries is a fact of life. And kinship -- the making and transforming of families, and the way kin processes interact with states and political economies, is central to this process. Not only do migrants often immigrate in order to support families back in their countries of origin, even babies or genetic material can also cross transnational boundaries in order to create new kinds of families. This course comprises an intensive introduction to recent literature on the question of kinship and migration. Questions we will address include: What are the effects of family reunification law which explicitly tries to privilege certain kinds of families in the context of migration? What happens when the roles traditionally associated with wifehood or motherhood stretch across national boundaries? What happens when people adopt children from other countries, grafting them onto new families? And how does the circulation of genetic material in the case of assisted reproduction create new kinds of belonging? By reading a series of recent ethnographies on issues including marriage migration and adoption, participants will gain insight into the complex ways in which the making and unmaking of kin ties creates new kinds of belonging and new forms of exclusion in the today's world. (C, 3)

Instructor(s): J. Cole Terms Offered: Spring

Prerequisite(s): Self, Culture, and Society or equivalent

Note(s): Not offered 2013-14

Equivalent Course(s): ANTH 32225

# CHDV 30129. Economic Development in the Inner City. 100 Units.

This course will explore conceptually what the issues are around the economic position of cities in the early 21st century, and how to think creatively about strategies to generate economic growth that would have positive consequences for low-income residents. Community Development Corporations, empowerment zones, housing projects, and business development plans through credit and technical assistance will all be considered.

Instructor(s): R. Taub Terms Offered: Winter

Note(s): Not offered 2013-14

Equivalent Course(s): CHDV 20129, SOCI 30129

# CHDV 30301. Research on Contextualized Learning, Cognition, and Development. 100 Units.

This seminar explores the theoretical and practical challenges inherent in conducting research that bridges mechanistic studies of cognition and development with investigations of learning situated in and across contexts. Students will engage with methodological and substantive course readings on learning in schools, families, and across diverse communities. In addition, students will participate in, and report on, research projects within this framework.

Instructor(s): L. Richland Terms Offered: Spring 2014

Note(s): Graduate course open to undergraduates

# CHDV 30302. Problems of Public Policy Implementation. 100 Units.

Once a governmental policy or program is established, there is the challenge of getting it carried out in ways intended by the policy makers. We explore how obstacles emerge because of problems of hierarchy, competing goals, and cultures of different groups. We then discuss how they may be overcome by groups, as well as by creators and by those responsible for implementing programs. We also look at varying responses of target populations. (C)

Instructor(s): R. Taub Terms Offered: Autumn

Prerequisite(s): One prior 20000-level social sciences course.

Note(s): PBPL 22100-22200-22300 may be taken in or out of sequence.

# CHDV 30304. Urban Neighborhoods and Urban Schools: Community Economic Opportunity and the Schools. 100 Units.

This course explores the interplay between schools and neighborhoods and how this plays out in shaping life chances.

Instructor(s): M. Keels Terms Offered: Winter

Note(s): Not offered 2013-14

Equivalent Course(s): SOCI 30314, PUBL 29304

# CHDV 30401. Intensive Study of a Culture: Lowland Maya History and Ethnography. 100 Units.

The survey encompasses the dynamics of first contact; long-term cultural accommodations achieved during colonial rule; disruptions introduced by state and market forces during the early postcolonial period; the status of indigenous communities in the twentieth century; and new social, economic, and political challenges being faced by the contemporary peoples of the area. We stress a variety of traditional theoretical concerns of the broader Mesoamerican region stressed (e.g., the validity of reconstructive ethnography; theories of agrarian community structure; religious revitalization movements; the constitution of such identity categories as indigenous, Mayan, and Yucatecan). In this respect, the course can serve as a general introduction to the anthropology of the region. The relevance of these area patterns for general anthropological debates about the nature of culture, history, identity, and social change are considered.

Instructor(s): J. Lucy Terms Offered: Autumn

Note(s): Not offered 2013-14

# CHDV 30405. Anthropology of Disability. 100 Units.

This seminar undertakes to explore "disability" from an anthropological perspective that recognizes it as a socially constructed concept with implications for our understanding of fundamental issues about culture, society, and individual differences. We explore a wide range of theoretical, legal, ethical, and policy issues as they relate to the experiences of persons with disabilities, their families, and advocates. The final project is a presentation on the fieldwork.

Instructor(s): M. Fred Terms Offered: Autumn

Prerequisite(s): Third- or fourth-year standing

Equivalent Course(s): MAPS 36900, ANTH 20405, ANTH 30405, HMRT 25210, HMRT 25210, COSC 26000

35210,SOSC 36900

# CHDV 30901. Biopsychology of Sex Differences. 100 Units.

This course will explore the biological basis of mammalian sex differences and reproductive behaviors. We will consider a variety of species, including humans. We will address the physiological, hormonal, ecological and social basis of sex differences. To get the most from this course, students should have some background in biology, preferably from taking an introductory course in biology or biological psychology. (A, 1)

Instructor(s): J. Mateo Terms Offered: Autumn

Note(s): Not offered 2013-14

Equivalent Course(s): PSYC 31600, EVOL 36900, GNSE 30901

# CHDV 31000. Cultural Psychology. 100 Units.

There is a substantial portion of the psychological nature of human beings that is neither homogeneous nor fixed across time and space. At the heart of the discipline of cultural psychology is the tenet of psychological pluralism, which states that the study of "normal" psychology is the study of multiple psychologies and not just the study of a single or uniform fundamental psychology for all peoples of the world. Research findings in cultural psychology thus raise provocative questions about the integrity and value of alternative forms of subjectivity across cultural groups. In this course we analyze the concept of "culture" and examine ethnic and cross-cultural variations in mental functioning with special attention to the cultural psychology of emotions, self, moral judgment, categorization, and reasoning. (B\*, C\*; 2\*, 3\*) Instructor(s): R. Shweder Terms Offered: Autumn

Prerequisite(s): Third- or fourth-year standing. Instructor consent required.

#### CHDV 31800. Modern Psychotherapies. 100 Units.

This course introduces students to the nature and varieties of modern psychotherapies by extensive viewing and discussion of videotaped demonstration sessions. Diverse therapeutic approaches will be examined, including psychodynamic, interpersonal, client-centered, gestalt, and cognitive-behavioral orientations. Couple and family therapy sessions, and sessions with younger clients, may also be viewed. Historical and conceptual models will be presented to deepen students' understandings of what is being viewed, but the main emphasis will be on experiential learning through observation and discussion. (D\*, 4\*)

Instructor(s): D. Orlinsky Terms Offered: Autumn

Equivalent Course(s): CHDV 27700

#### CHDV 31901. Language, Culture, and Thought. 100 Units.

Survey of research on the interrelation of language, culture, and thought from the evolutionary, developmental, historical, and culture-comparative perspectives with special emphasis on the mediating methodological implications for the social sciences.(B\*, C\*; 2\*, 3\*, 5\*)

Instructor(s): J. Lucy Terms Offered: Spring

Equivalent Course(s): CHDV 21901, ANTH 27605, ANTH 37605, HDCP 41950, PSYC 21950, PSYC 31900

# CHDV 32100. Culture, Power, Subjectivity. 100 Units.

This course takes up the classic, yet endlessly fascinating subject of the relationship of historically produced cultural structures and their relationship to individual and collective forms of subjectivity. Since the topic is huge, we will address it by reading classic texts in depth, analyzing them for the diverse ways in which classic social thinkers like Marx, Durkheim, Weber, Althuser, Bourdieu and Foucault have thought about the relationship between individuals and collectivities. Key questions we will address include the ways in social and economic formations structure the possibilities for individual human action, the relationship between religious formations and historical transformations, the role of class in the inculcation of taste and desire, and the ways in which, throughout the 19th century, new power/knowledge formations have created new ways through with subject formation takes place. (B, C\*)

Instructor(s): J. Cole Terms Offered: Winter

Prerequisite(s): Undergraduates require consent of instructor.

Note(s): Not offered 2013-14.

Equivalent Course(s): ANTH 32100

#### CHDV 32101. Culture and Power, Part II: Discourse and Performativity. 100 Units.

This class is the second part of a two part sequence entitled Culture, Power, Subjectivity although it is not necessary to take them in sequence. Part 1 typically examines history and structure as these have been addressed either by classic social theorists (Marx, Weber, Foucault) or anthropologists and historians (Sewell, Comaroffs, Sahlins/sub-altern studies). In this quarter, we focus on two different analytic constructs that anthropologists have used to theorize the nature of subjects and their relationship to historically produced social and cultural formations: discourse and performativity. We will situate these analytic approaches in terms of two distinct theoretical lineages—the one drawn from the Russian socio-historical tradition, the other derived from post-structuralist theory. The basic approach taken in class will be to learn the theories through close reading of texts, and then read several examples of how various scholars—usually anthropologists—use them in their own work. Readings include Vygotsky, Voloshinov, Bakhtin, Austin, Butler (and perhaps a few others). (C\*)

Instructor(s): J. Cole Terms Offered: Spring 2013

Prerequisite(s): Consent of instructor required for undergraduates.

Equivalent Course(s): ANTH 32110

# CHDV 32212. Love, Capital and Conjugality: Africa and India in Comparative Perspective. 100 Units.

Are love and money necessarily opposed? Is arranged marriage primitive? Many would argue yes. It is widely accepted that in modern societies romantic love, the couple and the nuclear family are the "correct" ways to organize intimate life. But, like many other normative ideas, these too were the product of particular historical developments in post-enlightenment Europe. A look at societies in other parts of the world demonstrates all too often that modernity in the realm of love, intimacy and family had a different trajectory from the European one. To characterize marriage, love, and familial relationships as backward or retrograde on grounds of their difference with (normative) models prevalent in the west results in a fundamental misunderstanding of the variety of different ways that societies have forged intimate relations. This course surveys ideas and practices surrounding love, marriage, and capital in the modern world with a particular focus on comparison between Africa and India. The first half of the class concentrates on key theoretical texts that lay the foundation for the study of gender, intimacy and modern life. The latter part of the class examines case studies from Africa and India. Using a range of readings the course will explore such questions as the emergence of companionate marriage in Europe; arranged marriage, dowry, love and money. (C) Instructor(s): J. Cole, R. Majumdar Terms Offered: Winter 2013

### CHDV 32411. Mediation, Moderation, and Spillover Effects. 100 Units.

This course is designed for graduate students and advanced undergraduate students from social sciences, statistics, health studies, public policy, and social services administration who will be or are currently involved in quantitative research. The course is focused on methodological issues with regard to mediation of intervention effects, moderated intervention effects, cumulative effects of treatment sequences, and spillover effects in a variety of settings. Research questions about why an intervention works, for whom, under what conditions, in what sequence, and whether one individual's treatment could affect other individuals' outcomes are often key to the advancement of scientific knowledge yet pose major analytic challenges. (M)

Instructor(s): G. Hong Terms Offered: Autumn

Note(s): Not offered 2013-14

Equivalent Course(s): PSYC 32411, PBPL 29411, STAT 33211, CCTS 32411

#### CHDV 33302. Disordered States. 100 Units.

This course examines the intersection between two areas of research which have recently experienced a resurgence in anthropology: 1) new ethnographic work on states and state-like institutions and 2) the literature on the subjective experiences of illness and suffering. In other words, the course will cover different ways in which the relationships between persons and states in crisis have been conceptualized in recent anthropological work. Specific topics covered may include: trauma and political violence; social memory and commemoration; citizenship and humanitarian intervention; political economic transformation and social marginalization. (C; 3\*)

Instructor(s): E. Raikhel Terms Offered: Spring

Note(s): Not offered 2013-2014

#### CHDV 34300. Primate Behavior and Ecology. 100 Units.

This course explores the behavior and ecology of nonhuman primates with emphasis on their natural history and evolution. Specific topics include methods for the study of primate behavior, history of primate behavior research, socioecology, foraging, predation, affiliation, aggression, mating, parenting, development, communication, cognition, and evolution of human behavior. (A, 1)

Instructor(s): D. Maestripieri Terms Offered: Autumn

Note(s): Not offered 2013-14.

Equivalent Course(s): CHDV 21800

### CHDV 34800. Kinship and Social Systems. 100 Units.

This course will use a biological approach to understanding how groups form and how cooperation and competition modulate group size and reproductive success. We will explore social systems from evolutionary and ecological perspectives, focusing on how the biotic and social environments favor cooperation among kin as well as how these environmental features influence mating systems and inclusive fitness. While a strong background in evolutionary theory is not required, students should have basic understanding of biology and natural selection. Course will use combination of lectures and discussion. (A\*, 1\*)

Instructor(s): J. Mateo Terms Offered: Autumn

Equivalent Course(s): EVOL 34800

# CHDV 37201. Language in Culture I. 100 Units.

Among topics discussed in the first half of the sequence are the formal structure of semiotic systems, the ethnographically crucial incorporation of linguistic forms into cultural systems, and the methods for empirical investigation of "functional" semiotic structure and history.

Instructor(s): M. Silverstein Terms Offered: Autumn

Prerequisite(s): Consent of instructor

Equivalent Course(s): ANTH 37201, LING 31100, PSYC 47001

#### CHDV 37500-37502-37503. Research Seminar in Animal Behavior I-II-III.

This workshop involves weekly research seminars in animal behavior given by faculty members, postdocs, and advanced graduate students from this and other institutions. The seminars are followed by discussion in which students have the opportunity to interact with the speaker, ask questions about the presentation, and share information about their work. This workshop exposes students to current comparative research in behavioral biology and provides interactions with some of the leading scientists in this field. (A, 1)

#### CHDV 37500. Research Seminar in Animal Behavior I. 100 Units.

Instructor(s): J. Mateo Terms Offered: Autumn

Prerequisite(s): Graduate students only.

Note(s): Students register for this course in Autumn Quarter and receive credit in Spring Quarter after successful completion of the year's work.

Equivalent Course(s): EVOL 37600

# CHDV 37502. Research Seminar in Animal Behavior II. 100 Units.

Instructor(s): J. Mateo Terms Offered: Winter

Prerequisite(s): Graduate students only.

Equivalent Course(s): EVOL 37700

#### CHDV 37503. Research Seminar in Animal Behavior III. 100 Units.

Instructor(s): J. Mateo Terms Offered: Spring

Note(s): Graduate students only. Equivalent Course(s): EVOL 37800

#### CHDV 37502. Research Seminar in Animal Behavior II. 100 Units.

Instructor(s): J. Mateo Terms Offered: Winter

Prerequisite(s): Graduate students only. Equivalent Course(s): EVOL 37700

#### CHDV 37503. Research Seminar in Animal Behavior III. 100 Units.

Instructor(s): J. Mateo Terms Offered: Spring

Note(s): Graduate students only. Equivalent Course(s): EVOL 37800

#### CHDV 37801. Evolutionary Psychology. 100 Units.

This course explores human social behavior from the perspective of a new discipline: evolutionary psychology. In this course we will read and discuss articles in which evolutionary theory has been applied to different aspects of human behavior and social life such as: developmental sex differences, cooperation and altruism, competition and aggression, physical attractiveness and mating strategies, incest avoidance and marriage, sexual coercion, parenting and child abuse, language and cognition, and psychological and personality disorders. (A, 1)

Instructor(s): D. Maestriperi, D. Gallo Terms Offered: Winter

Prerequisite(s): Undergraduates must have permission of instructor.

Note(s): Not offered 2013-14

Equivalent Course(s): PSYC 41450, CHDV 41451

# CHDV 38101-38102. Anthropology of Museums I-II.

This sequence examines museums from a variety of perspectives. We consider the World's Columbian Exposition of 1893, the Native American Graves Protection and Repatriation Act, the image and imagination of African American culture as presented in local museums, and museums as memorials, as exemplified by Holocaust exhibitions. Several visits to area museums required.

#### CHDV 38101. Anthropology of Museums I. 100 Units.

Instructor(s): M. Fred Terms Offered: Winter

Prerequisite(s): Advanced standing and consent of instructor

Equivalent Course(s): ANTH 24511, ANTH 34502, CRES 34501, MAPS

34500,SOSC 34500

#### CHDV 38102. Anthropology of Museums II. 100 Units.

Instructor(s): M. Fred Terms Offered: Winter

Prerequisite(s): Advanced standing and consent of instructor

### CHDV 38101-38102. Anthropology of Museums I-II.

This sequence examines museums from a variety of perspectives. We consider the World's Columbian Exposition of 1893, the Native American Graves Protection and Repatriation Act, the image and imagination of African American culture as presented in local museums, and museums as memorials, as exemplified by Holocaust exhibitions. Several visits to area museums required.

# CHDV 38101. Anthropology of Museums I. 100 Units.

Instructor(s): M. Fred Terms Offered: Winter

Prerequisite(s): Advanced standing and consent of instructor

Equivalent Course(s): ANTH 24511, ANTH 34502, CRES 34501, MAPS

34500,SOSC 34500

#### CHDV 38102. Anthropology of Museums II. 100 Units.

Instructor(s): M. Fred Terms Offered: Winter

Prerequisite(s): Advanced standing and consent of instructor

# CHDV 38102. Anthropology of Museums II. 100 Units.

Instructor(s): M. Fred Terms Offered: Winter

Prerequisite(s): Advanced standing and consent of instructor

#### CHDV 38701. Social and Cultural Foundations of Mental Health. 100 Units.

The wellbeing of individuals depends on sociocultural as well as psychobiological conditions, yet current professional thinking about mental health and illness focuses almost exclusively on psychobiological factors. Mental health is influenced significantly by the levels and types of environmental support and of stress that persons experience in their social milieus, which differentially affect their individual strengths and vulnerabilities. This course aims to broaden our concepts of positive mental health by examining the contributions of major social scientific theorists, such as Durkheim, Freud, Simmel, Weber, Mead and other classic and recent writers whose works demonstrate the vital connection between individual personality and sociocultural context. The course will consist of lectures and discussion of readings, with grades based on short paper assignments. (D; 4)

Instructor(s): D. Orlinsky Terms Offered: Spring 2013

Note(s): Not offered 2013-14 Equivalent Course(s): HIPS 26101

#### CHDV 39301. Qualitative Research Methods. 100 Units.

The goal of this course is for students to learn a range of qualitative research methods, understand the uses and limitations of each of these methods, and gain hands-on experience designing, completing, and writing up a project using one or more of these methods. The first three weeks focus on developing a research plan: reviewing the literature, formulating a research question, and evaluating available methods to investigate that question. The remaining weeks will focus on research ethics, data collection, data analysis, and writeup. Throughout the course, we will be reading and discussing both texts that explicitly teach method and examples of different qualitative approaches, including ethnography, personcentered interviewing, Grounded Theory, narrative analysis, and cultural models. All students will complete a small-scale research project using one or more of the methods covered in this course. (M)

Instructor(s): E. Fein Terms Offered: Winter

# CHDV 39900. Readings: Human Development. 100 Units.

Instructor(s): Staff Terms Offered: Autumn, Winter, Spring, Summer

Prerequisite(s): Instructor consent required.

# CHDV 40000. HD Concepts. 100 Units.

Our assumptions about the processes underlying development shape how we read the literature, design studies, and interpret results. The purpose of this course is two-fold in that, first, it makes explicit both our own assumptions as well as commonly held philosophical perspectives that impact the ways in which human development is understood. Second, the course provides an overview of theories and domain-specific perspectives related to individual development across the life-course. The emphasis is on issues and questions that have dominated the field over time and, which continue to provide impetus for research, its interpretation, and the character of policy decisions and their implementation. Stated differently, theories have utility and are powerful tools. Accordingly, the course provides a broad basis for appreciating theoretical approaches to the study of development and for understanding the use of theory in the design of research and its application. Most significant, theories represent heuristic devices for "real time" interpretations of daily experiences and broad media disseminated messages.

Instructor(s): Staff Terms Offered: Autumn Prerequisite(s): CHD Grad Students Only

Note(s): Required course for CHD grad students.

# CHDV 40110. Color, Ethnicity, Cultural Context, and Human Vulnerability. 100 Units.

The specific level of vulnerability may vary across the life course; nevertheless, all humans are vulnerable and, thus, unavoidably possess both risks and protective factors. The level and character of human vulnerability matters and has implications for physical health, psychological well being, the character of culture, and mental health status. The balance between the two (i.e., risks and protective factors) can be influenced by ethnic group membership and identifiability (e.g., skin color). The cultural contexts where growth and development take place play a significant role in life course human development. As a globally admired cultural context with a particular national identity, one of America's foundational tenets is that citizenship promises the privilege of freedom, allows access to social benefits, and holds sacred the defense of rights. Our centuries-old cultural context and national identity as a liberty-guaranteeing democracy also presents challenges. The implied identity frequently makes it difficult to acknowledge that the depth of experience and its determinative nature may be but skin deep. In America, there continues to be an uneasiness and palpable personal discomfort whenever discussions concerning ethnic diversity, race, color and the Constitutional promise and actual practice of equal opportunity occur. Other nations are populated with vulnerable humans, as well, and experience parallel dissonance concerning the social tolerance of human diversity.

Given the shared status of human vulnerability, the course unpacks and analyzes how differences in ethnicity, skin color and other indicators of group membership impact vulnerability and opportunity for diverse groups. Specifically, the course analyzes the balance between risk level and protective factor presence and examines the consequent physical health status, psychological well-being, and mental health outcomes for its dissimilar citizens. The course especially emphasizes the American cultural context but, in addition, highlights the unique experiences of ethnically varied individuals developing in multiple cultural contexts around the globe. (D, 4) Instructor(s): M. Spencer Terms Offered: Autumn

Prerequisite(s): Undergraduates require permission from instructor.

Equivalent Course(s): CRES 40110

# CHDV 40207. Development in Adolescents. 100 Units.

Adolescence represents a period of unusually rapid growth and development. At the same time, under the best of social circumstances and contextual conditions, the teenage years represent a challenging period. The period also affords unparalleled opportunities with appropriate levels of support. Thus, the approach taken acknowledges the challenges and untoward outcomes, while also speculates about the predictors of resiliency and the sources of positive youth development. The perspective taken unpacks the developmental period's complexity as exacerbated by the many contextual and cultural forces which are often made worse by unacknowledged socially structured conditions, which interact with youths' unavoidable and unique meaning making processes. As a function of some youths' privileging situations versus the low resource and chronic conditions of others, both coping processes and identity formation processes are emphasized as highly consequential. Thus, stage specific developmental processes are explored for understanding gap findings for a society's diverse youth. In sum, the course presents the experiences of diverse youth from a variety of theoretical perspectives. The strategy improves our understanding about the "what" of human development as well as the "how." Ultimately, the conceptual orientation described is critical for 1) designing better social policy, 2) improving the training and support of socializing agents (e.g., teachers), and 3) enhancing human developmental outcomes (e.g., resilient patterns). (2)

Instructor(s): M. Spencer Terms Offered: Winter

Prerequisite(s): Graduate students only.

# CHDV 40306. Academic and Behavior Gender Gaps Along the Pathway to Degree Attainment. 100 Units.

This course explores the complex intersection of race/ethnicity, socioeconomic status and gender in determining unequal outcomes in American education. We will examine the recent history of the reversal of the gender gap in academic achievement, the research evidence examining potential causes of this reversal, and policies aimed at improving male academic achievement. We will also examine whether issue of male underachievement only applies to subgroups of Americans as indexed by race/ethnicity and socioeconomic status. Students will be introduced to several datasets that can be used to examine issues of how gender is associated with academic success along the pathway to degree attainment. Students are expected to complete a final empirical paper that includes the discussion of data, analyses, results, and policy implications. Students must have taken a graduate level statistics course as a prerequisite. (2)

Instructor(s): M. Keels Terms Offered: Winter Prerequisite(s): Graduate level statistics course

Note(s): Not offered 2013-14

# CHDV 40851. Topics in Developmental Psychology I. 100 Units.

Instructor(s): A. Woodward, L. Richland Terms Offered: Autumn

Note(s): Topic: Comparative Human Development

Equivalent Course(s): PSYC 40851

# CHDV 41160. New Perspectives on Vulnerability. 100 Units.

Vulnerability is undergoing re-evaluation in philosophy, the social sciences and the humanities. From having been perceived as a condition from which subjects should be defended, rescued or liberated, vulnerability has increasingly come to be theorized as a position and experience that confronts us with the limits of understanding, empathy, morality and theory. This course will read work that attempts to engage with vulnerability not so much as something to be overcome, but, rather, as a challenge that can guide us towards new ways of thinking about political life and engaging with the world. Course literature includes Giorgio Agamben's work on "bare life", Judith Butler's writing on precarious life, Jacques Derrida's writings on animals, Rosemarie Garland-Thomson's book on staring, Martha Nussbaum's book on "frontiers of justice" and Bryan Turner's work on vulnerability and human rights. (B\*, C\*, D\*; 2\*, 3\*, 4\*)

Instructor(s): D. Kulick Terms Offered: Autumn

Prerequisite(s): Consent required, may be obtained at first class meeting. Graduate students and upper-level undergraduates only.

Equivalent Course(s): GNDR 41160, ANTH 40805

#### CHDV 41451. Evolutionary Psychology. 100 Units.

This course explores human social behavior from the perspective of a new discipline: evolutionary psychology. In this course we will read and discuss articles in which evolutionary theory has been applied to different aspects of human behavior and social life such as: developmental sex differences, cooperation and altruism, competition and aggression, physical attractiveness and mating strategies, incest avoidance and marriage, sexual coercion, parenting and child abuse, language and cognition, and psychological and personality disorders. (A, 1)

Instructor(s): D. Maestriperi, D. Gallo Terms Offered: Winter

Prerequisite(s): Undergraduates must have permission of instructor.

Note(s): Not offered 2013-14

Equivalent Course(s): PSYC 41450, CHDV 37801

# CHDV 42214. Ethnographic Writing. 100 Units.

This course is intended for qualitative, anthropologically oriented graduate students engaged in the act of ethnographic writing, be it a thesis, a prospectus or an article. The course is organized around student presentations of work in progress and critical feedback from course participants. It is hoped that each participant will emerge from the course with a polished piece of work. Only graduate students will be admitted and consent of the instructor is mandatory. (M)

Instructor(s): J. Cole Terms Offered: Winter

Prerequisite(s): Permission of instructor, graduate students only.

Note(s): Not offered 2013-14

# CHDV 42401. Trial Research in Human Development - I. 100 Units.

This course is taken in the Spring quarter of the first year, and again in the Autumn quarter of the second year. The purpose of this seminar is to help students formulate and complete their trial research projects.

Instructor(s): Staff Terms Offered: Spring Prerequisite(s): CHD grad students only.

Note(s): Required

### CHDV 42402. Trial Research in Human Development - II. 100 Units.

Second in required Trial Research Seminar sequence. The purpose of this seminar is to help students formulate and complete their trial research projects.

Instructor(s): Staff Terms Offered: Autumn

Prerequisite(s): CHDV 42401 Trial Research in Human Development - I. CHD graduate students only.

Note(s): Required.

# CHDV 43204. Medical Anthropology. 100 Units.

This course introduces students to the central concepts and methods of medical anthropology. Drawing on a number of classic and contemporary texts, we will consider both the specificity of local medical cultures and the processes which increasingly link these systems of knowledge and practice. We will study the social and political economic shaping of illness and suffering and will examine medical and healing systems – including biomedicine – as social institutions and as sources of epistemological authority. Topics covered will include the problem of belief; local theories of disease causation and healing efficacy; the placebo effect and contextual healing; theories of embodiment; medicalization; structural violence; modernity and the distribution of risk; the meanings and effects of new medical technologies; and global health. (C\*, D\*; 3, 4)

Instructor(s): E. Raikhel Terms Offered: Spring

Prerequisite(s): Sosc sequence Note(s): Not offered 2013-14 Equivalent Course(s): CHDV 23204

#### CHDV 43248. Research Methods in Behavior and Development. 100 Units.

In this graduate seminar we will discuss research design, experimental methods, statistical approaches and field techniques. Other topics will be covered depending on participant interests, such as acoustic analyses, ethogram development, event recorders, spectrophotometers, marking methods, spatial analyses and grant-writing strategies. The course is primarily designed for studies of non-human animals, although studies of human behavior, especially developmental studies, will be addressed. (M)

Instructor(s): J. Mateo Terms Offered: Winter Prerequisite(s): Permission of instructor.

Note(s): Not offered 2013-14

# CHDV 43302. Illness and Subjectivity. 100 Units.

While anthropology and other social sciences have long explored the social and cultural shaping of the self and personhood, many scholars have recently employed the rubric of "subjectivity" to articulate the links between collective phenomena and the subjective lives of individuals. This graduate seminar will examine "subjectivity"—and related concepts—focusing on topics where such ideas have been particularly fruitful: illness, pathology and suffering. We will critically examine the terms "self," "personhood" and "subjectivity"—and their relationship to one another. Additional literatures and topics covered may include: illness and narrative; healing and the self; personhood and new medical technologies. (3, 4\*) Instructor(s): E. Raikhel Terms Offered: Spring

Note(s): Graduate students only. Equivalent Course(s): ANTH 51305

#### CHDV 43550. Gesture. 100 Units.

This course will examine the spontaneous movements that we produce when we talk—our gestures. We will first consider what gesture is (and is not), and then explore gesture in relation to communication, thinking, learning, action, and the brain, ending with an exploration of gesture as it becomes language, on-the-spot and over longer periods of time.

Instructor(s): S. Goldin-Meadow Terms Offered: Winter

Equivalent Course(s): PSYC 43550

#### CHDV 43600. Processes of Judgement and Decision Making. 100 Units.

This course offers a survey of research on judgment and decision making, with emphasis placed on uncertainty and (intrapersonal) conflict. An historical approach is taken in which the roots of current research issues and practices are traced. Topics are drawn from the following areas: evaluation and choice when goals are in conflict and must be traded off, decision making when consequences of the decision are uncertain, predictive and evaluative judgments under conditions of uncertain, incomplete, conflicting, or otherwise fallible information.

Instructor(s): W. Goldstein Terms Offered: Winter

Equivalent Course(s): PSYC 43600

### CHDV 44700. Seminar: Topics in Judgement and Decision Making. 100 Units.

This course offers a survey of research on judgment and decision making, with emphasis placed on uncertainty and (intrapersonal) conflict. An historical approach is taken in which the roots of current research issues and practices are traced. Topics are drawn from the following areas: evaluation and choice when goals are in conflict and must be traded off, decision making when consequences of the decision are uncertain, predictive and evaluative judgments under conditions of uncertain, incomplete, conflicting, or otherwise fallible information.

Instructor(s): W. Goldstein Terms Offered: Spring

Equivalent Course(s): PSYC 44700

# CHDV 45501. Cognition and Education. 100 Units.

Cognition and Education will explore research bridging basic theories of cognition with rigorous studies of educational practice. This exciting pairing yields insights for both psychological theories of cognition and educational theories of practice. Complete psychological theories of cognition must be able to explain thinking and learning in dynamic, everyday contexts. At the same time, this work cannot impact practice without being well grounded in teachers and students' everyday activities. Course readings will include psychological studies of cognition and learning, developmental studies of children's thinking, and educational studies of teaching in STEM (Science, Technology, Engineering, and Mathematics) fields. (5\*)

Instructor(s): L. Richland Terms Offered: Spring

Note(s): Not offered 2013-14

# CHDV 45550. From Birds to Words: How Do Communication Systems Come About? 100 Units.

This course will examine commonalities in the development and organization of communication across animals (birds and people) who are not closely linked evolutionarily. In this way, we hope to explore essential elements of social communication (what they are, which elements are flexible with respect to species, time, cultural specificity). Our goal is to start with behaviors that are shared across birds and humans, and unravel deeper shared mechanisms across organisms that rely on complex communication systems over different timespans (evolution, ontogeny).

Instructor(s): S. Goldin-Meadow, S. London Terms Offered: Spring Equivalent Course(s): PSYC 45550

# CHDV 45600. When Cultures Collide: The Multicultural Challenge in Liberal Democracy. 100 Units.

Coming to terms with diversity in an increasingly multicultural world has become one of the most pressing public policy projects for liberal democracies in the early 21st century. One way to come to terms with diversity is to try to understand the scope and limits of toleration for variety at different national sites where immigration from foreign lands has complicated the cultural landscape. This seminar examines a series of legal and moral questions about the proper response to norm conflict between mainstream populations and cultural minority groups (including old and new immigrants), with special reference to court cases that have arisen in the recent history of the United States. (3\*)

Instructor(s): R. Shweder Terms Offered: Winter

Equivalent Course(s): PSYC 45300, ANTH 45600, HMRT 35600, GNDR 45600

# CHDV 45601. Moral Development and Comparative Ethics. 100 Units.

Three types of questions about morality can be distinguished: (1) philosophical, (2) psychological, and (3) epidemiological. The philosophical question asks, whether and in what sense (if any) "goodness" or "rightness" are real or objective properties that particular actions possess in varying degrees. The psychological question asks, what are the mental states and processes associated with the human classification of actions are moral or immoral, ethical or unethical. The epidemiological question asks, what is the actual distribution of moral judgments across time (developmental time and historical time) and across space (for example, across cultures). In this seminar we will read classic and contemporary philosophical, psychological, and anthropological texts that address those questions. (B, C; 3)

Instructor(s): R. Shweder Terms Offered: Autumn

Note(s): Graduate students only. Equivalent Course(s): PSYC 44000

#### CHDV 45700. Urban Field Research, 100 Units.

This course focuses on methods for collecting qualitative field data in urban settings from the ground up, so to speak, and to discuss some related methodological issues. In addition to readings, there are field assignments and students discuss each other's notes. (M)

Instructor(s): R. Taub Terms Offered: Spring 2014

Prerequisite(s): Graduate students only. Note(s): Offered every other year. Equivalent Course(s): SOCI 50017

#### CHDV 47901-47902-47903. Beginning Modern Spoken Yucatec Maya I-II-III.

This course is a basic introduction to the modern Yucatec Maya language, an indigenous American language spoken by about 750,000 people in southeastern Mexico. Three consecutive quarters of instruction are intended for students aiming to achieve basic and intermediate proficiency. Students receiving FLAS support must take all three quarters. Others may elect to take only the first quarter or first two quarters. Students wishing to enter the course midyear (e.g., those with prior experience with the language) must obtain consent of instructor. Materials exist for a second year of the course; interested students should consult the instructor. Students wishing to continue their training with native speakers in Mexico may apply for FLAS funding in the summer.

### CHDV 47901. Beginning Modern Spoken Yucatec Maya I. 100 Units.

Instructor(s): John Lucy

Equivalent Course(s): LACS 47901, CHDV 27901, LACS 27901

#### CHDV 47902. Beginning Modern Spoken Yucatec Maya II. 100 Units.

Instructor(s): J. Lucy Terms Offered: Not offered 2012-13; will be offered 2013-14 Equivalent Course(s): CHDV 27902, LACS 27902

CHDV 47903. Beginning Modern Spoken Yucatec Maya III. 100 Units.

Instructor(s): J. Lucy

Equivalent Course(s): LACS 47903, CHDV 27903, LACS 27903

# CHDV 47902. Beginning Modern Spoken Yucatec Maya II. 100 Units.

Instructor(s): J. Lucy Terms Offered: Not offered 2012-13; will be offered 2013-14 Equivalent Course(s): CHDV 27902, LACS 27902

### CHDV 47903. Beginning Modern Spoken Yucatec Maya III. 100 Units.

Instructor(s): J. Lucy

Equivalent Course(s): LACS 47903, CHDV 27903, LACS 27903

#### CHDV 48414. Evolution of Human Development. 100 Units.

Instructor(s): D. Maestripieri Terms Offered: Spring 2012

Note(s): Fulfills breadth requirement in areas 1 and 2. Not offered 2013-14

#### CHDV 48415. Displaced nations and the politics of belonging. 100 Units.

While immigration has given rise to cultural hybridity and cosmopolitan forms of belonging, it has also produced diasporic nations and long-distance nationalisms that strive to maintain relationships with real or imagined homelands. This seminar examines what it means to belong to a nation that is not coterminous with a territorial state. It explores both the impact of diasporic nation-making on immigrant subjectivities and on the cultural politics of belonging in receiving states. How, for instance, does deterritorialized nation-making implicate immigrant bodies, histories, and subjectivities? How is the traditionally ethnos-based diasporic nation reconceptualised by considering intersecting queer solidarities or religious nationalisms? How does deterritorialized nation-making complicate ideologies of citizenship and belonging, and how do immigrant-receiving states manage these complications? To explore these issues, we will draw on ethnographic monographs and multidisciplinary theoretical perspectives that critically examine the concepts of the nation, nationalism, deterritorialized nationalism, and citizenship, as they implicate history and memory, the body, sexual and religious solidarities, and multiculturalism. (3)

Instructor(s): G. Embuldeniya Terms Offered: Spring 2013

Equivalent Course(s): ANTH 45615

#### CHDV 49900. Research in Human Development. 100 Units.

Instructor(s): Staff Terms Offered: Autumn, Winter, Spring, Summer Prerequisite(s): Instructor consent required. Graduate students only.



# COMMITTEE ON CONCEPTUAL AND HISTORICAL STUDIES OF SCIENCE

#### Chair

- Adrian Johns Professors
- Lorraine Daston, Social Thought
- · Arnold Davidson, Philosophy
- Judith B. Farquhar, Anthropology
- Michael Foote, Geophysical Sciences
- Jan Goldstein, History
- Adrian Johns, History
- Karin Knorr Cetina, Sociology and Anthropology
- · Karl Matlin, Department of Surgery
- Salikoko Mufwene, Linguistics
- · Robert J. Richards, History
- Stephen M. Stigler, Statistics
- Alison Winter, History Associate Professors
- James A. Evans, Sociology
- Joseph Masco, Anthropology
- E. Glen Weyl, Economics Emeritus Faculty
- Leo Kadanoff, Physics and Mathematics
- Robert Perlman, Pediatrics
- William C. Wimsatt, Philosophy

The Committee on Conceptual and Historical Studies of Science (CHSS) is an interdisciplinary graduate program dedicated to advancing social, historical, and philosophical perspectives on science. Its areas of interest are broad, extending across the sciences and from the ancient world to the present day. Its faculty derive from many departments in the University, but particularly from History, Sociology, Anthropology, and Philosophy. We currently have major strengths in the study of evolutionary biology, psychology, and medicine, and in issues of the social activity of science, such as those relating to scientific authority, credibility, communication, and intellectual property. Students in the Ph.D. program have an opportunity to investigate such aspects of the scientific enterprise in depth, within its many rich historical, social, and philosophical contexts. They are also encouraged to grapple with the practices and approaches of science itself.

A brief description of the Committee's degree requirements is provided below, along with a representative list of courses that have been taught in recent years.

For more complete information, you are encouraged to consult the website at http://chss.uchicago.edu/. This site contains an up to date description of faculty research interests, a complete statement of degree requirements, descriptions of individual courses being taught this year, a calendar of events (including meetings of the Committee's regular Workshop in the History, Philosophy, and Sociology of Science), a list of students who have received Ph.D.s from the Committee with the titles of their dissertations, and more.

Those with questions about the Committee should write to the Secretary, The Committee on Conceptual and Historical Studies of Science, The University of Chicago, 1126 East 59th Street, Chicago, IL 60637 (bethcalderon@uchicago.edu).

# APPLICATION

New students are admitted to the Committee through the Division of the Social Sciences. Applicants will be expected to submit undergraduate transcripts, scores from the general Graduate Record Examination, three letters of recommendation, short descriptions of their interests and/or reasons for wanting to study in CHSS, and a writing sample.

The application process for admission and financial aid for all Social Sciences graduate programs is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online at: https://socialsciences.uchicago.edu/admissions/apply. Questions pertaining to admissions and aid should be directed to admissions@ssd.uchicago.edu or (773) 702-8415.

Our application process is now entirely online (paperless). **All supporting material** - including letters of recommendation, transcripts, and writing samples (if required by a specific department) - **must be submitted electronically through the online application.** 

More information about applying to programs in the University of Chicago's Division of the Social Sciences can be found at http://socialsciences.uchicago.edu/page/prospective

# DEGREE REQUIREMENTS

Every new student in CHSS is assigned an advisor, with whom he or she designs an individual program of study. Because the interests of students within CHSS vary widely, so too do these programs. Yet all students are expected to fulfill certain common requirements. Full and up to date details are given on the website, but the main elements are described here.

Students choose one of the following options:

- 1. SCIENCE OPTION: The student may earn a master's degree in a science (here understood to include mathematics, statistics, and social science).
- 2. PHILOSOPHY OPTION: The student may earn a master's degree in philosophy.
- 3. HISTORY OPTION: The student may earn a master's degree in history.

All students must complete a total of at least eighteen courses at the University for a grade of B or better, including at least seven CHSS courses. They must maintain at least a B+ average every quarter. Those selecting the philosophy or history options must take a coherent series of six courses in a scientific area at the University, approved by the committee and of an appropriately advanced nature. This will normally mean that students must take at least some portion of their science work at a graduate level. Note that if a student enters the program with a master's degree in an appropriate area, the committee determines what level of credit is given for it.

The expected timetable is that students entering with a master's degree will complete coursework by the end of the second year, and those entering without will complete it by the end of year three (see the website for this and other details of the expected timetable).

Among the coursework of the first two years, students should take three courses offered by the committee: Philosophy of Science, History of Science, and Introduction to Science Studies.

Students must them pass two oral examinations. Each student has the option of taking the exams in history of science, philosophy of science, sociology of science, or anthropology of science; but at least one of the exams must be in either history of science or philosophy of science. These exams are, in part, designed by the students themselves.

At this point the student writes a dissertation proposal, and defends it at a hearing before his or her dissertation committee. He or she is then considered to have advanced to Ph.D. candidacy, and proceeds to write the dissertation itself.

#### COURSES

The department website offers descriptions of representative courses offered in recent years: http://chss.uchicago.edu/courses/

#### CONCEPTUAL/HISTORICAL STUDIES OF SCIENCE COURSES

#### CHSS 30217. Introduction to Science and Technology Studies. 100 Units.

Science, technology and information are the 'racing heart' of contemporary cognitive capitalism and the engine of change of our technological culture. They are deeply relevant to the understanding of contemporary societies. But how are we to understand the highly esoteric cultures and practices of science, technology and information? During the twentieth century, sociologists, historians, philosophers, and anthropologists raised original, interesting, and consequential questions about the sciences and technology. Often their work drew on and responded to each other, and, taken together, their various approaches came to constitute a field, "science and technology studies." The course furnishes an initial guide to this field. Students will not only encounter some of its principal concepts, approaches, and findings, but will also get a chance to apply science-studies perspectives themselves by performing a fieldwork project. Among the topics we examine are the sociology of scientific knowledge and its applications, constructivism and actor network theory, the study of technology and information, as well as recent work on knowledge and technology in the economy and finance. Beginning with the second week of classes, we will devote the second half of the class to presentations and discussion.

Instructor(s): K. Knorr Cetina Terms Offered: Not offered 2013-14 Equivalent Course(s): SOCI 30217, ANTH 32410, ANTH 22410, SOCI 20217

#### CHSS 31202. Goethe: Literature, Science, Philosophy. 100 Units.

This lecture-discussion course will examine Johann Wolfgang von Goethe's intellectual development, from the time he wrote *Sorrows of Young Werther* through the final states of *Faust*. Along the way, we will read a selection of Goethe's plays, poetry, and travel literature. We will also examine his scientific work, especially his theory of color and his morphological theories. On the philosophical side, we will discuss Goethe's coming to terms with Kant (especially the latter's third Critique) and his adoption of Schelling's transcendental idealism. The theme uniting the exploration of the various works of Goethe will be unity of the artistic and scientific understanding of nature, especially as he exemplified that unity in "the eternal feminine."

Instructor(s): R. Richards Terms Offered: Winter Note(s): German is not required, but helpful.

Equivalent Course(s): HIPS 26701,PHIL 20610,PHIL 30610,GRMN 25304,GRMN

35304,FNDL 23511,HIST 25304

#### CHSS 31502. Sciences of Memory in 20th Century. 100 Units.

This course will examine a series of episodes in the history of the understanding of autobiographical memory, beginning with the emergence of academic psychology, and also psychoanalysis, in the late nineteenth century, and ending with the "memory war" of the 1980s and 90s The course will include an examination of the yoked history of beliefs about individual and "collective" memory, of the impact of memory therapies during the first and second World Wars, of the impact of innovations in brain surgery on beliefs about the physiological memory record and the neurophysiology of remembering, and the impact of the rise forensic psychology on the popular, scientific, and legal understanding of memory.

Instructor(s): A. Winter Terms Offered: Winter

Equivalent Course(s): HIPS 28002, HIST 35505, HIST 25510

#### CHSS 31900. Intellectual Property and Piracy. 100 Units.

Intellectual property presents some of the most pressing problems in modern science, industry, and law. This course helps students to understand why. It explains the principles of modern intellectual property, by examining their historical development over the last five hundred years. Using sources from the history of literature, art, and music—as well as from modern science and information technology—students will discover how piracy and property have clashed since the Renaissance, and still do so today. They will then be well-placed to address the central problem of intellectual property, and one of the most basic questions facing today's universities: What is the proper relation between creativity and commerce? Instructor(s): A. Johns Terms Offered: Winter

Equivalent Course(s): HIPS 26700,LLSO 22104,HIST 33000,HIST 23000

#### CHSS 32805. Nature/Culture. 100 Units.

Exploring the critical intersection between science studies and political ecology, this course interrogates the contemporary politics of "nature." Focusing on recent ethnographies that complicated our understandings of the environment, the seminar examines how conceptual boundaries (e.g., nature, science, culture, global/local) are established or transgressed within specific ecological orders). Instructor(s): J. Masco Terms Offered: Not offered 2013-14; will be offered 2014-15 Equivalent Course(s): ANTH 23805,ANTH 43805,HIPS 26203

#### CHSS 32900. History of Statistics. 100 Units.

This course covers topics in the history of statistics, from the eleventh century to the middle of the twentieth century. We focus on the period from 1650 to 1950, with an emphasis on the mathematical developments in the theory of probability and how they came to be used in the sciences. Our goals are both to quantify uncertainty in observational data and to develop a conceptual framework for scientific theories. This course includes broad views of the development of the subject and closer looks at specific people and investigations, including reanalyses of historical data.

Instructor(s): S. Stigler Terms Offered: Spring

Prerequisite(s): Prior statistics course

Equivalent Course(s): STAT 26700, HIPS 25600, STAT 36700

#### CHSS 33500. Elementary Logic. 100 Units.

An introduction to the techniques of modern symbolic logic. The focus will be on the syntax and semantics of classical propositional and first-order quantificational logic. The course will introduce methods for determining whether a given argument is valid or invalid. We will discuss how statements and arguments of ordinary discourse can be represented within the formal language of propositional and quantificational logic. There will also be discussion of some important metatheorems for these logical systems. (B) (II)

Instructor(s): M. Malink Terms Offered: Autumn

Note(s): Course not for field credit.

Equivalent Course(s): PHIL 20100, HIPS 20700, PHIL 30000

#### CHSS 33600. Intermediate Logic. 100 Units.

In this course, we will prove the soundness and completeness of standard deductive systems for both sentential and first-order logic. We will also establish related results in elementary model theory, such as the compactness theorem for first-order logic, the Löwenheim-Skolem theorem, and Lindström's theorem. (B) (II)

Instructor(s): A. Vasudevan Terms Offered: Winter

Equivalent Course(s): PHIL 39400, HIPS 20500, PHIL 29400

#### CHSS 35110. Philosophy of History: Narrative and Explanation. 100 Units.

This lecture-discussion course will trace different theories of explanation in history from the nineteenth century to the present. We will examine the ideas of Humboldt, Ranke, Dilthey, Collingwood, Braudel, Hempel, Danto, and White. The considerations will encompass such topics as the nature of the past such that one can explain its features, the role of laws in historical explanation, the use of *Verstehen* history as a science, the character of narrative explanation, the structure of historical versus other kinds of explanation, and the function of the footnote. (B) (II)

Instructor(s): R. Richards Terms Offered: Autumn

Equivalent Course(s): HIST 35110,PHIL 20506,PHIL 30506,HIST 25110

#### CHSS 35208. Motion Pictures in the Human Sciences. 100 Units.

This course will examine the relationship between moving images, particularly motion-picture films, and the human sciences broadly construed, from the early days of cinema to the advent of FMRI. It will use primary source documents alongside screenings to allow students to study what the moving image meant to researchers wishing to develop knowledge of mind and behavior—what they thought film could do that still photography, and unmediated human observation, could not. The kinds of motion pictures we will study will vary widely, from infant development studies to psychiatric films, from documentaries to research films, and from films made by scientists or clinicians as part of their laboratory or therapeutic work to experimental films made by seasoned film-makers. We will explore how people used the recordings they made, in their own studies, in communications with other scientists, and for didactic and other purposes. We will also discuss how researchers' claims about mental processes—perception, memory, consciousness, and interpersonal influence—drew on their understandings of particular technologies.

Instructor(s): A. Winter Terms Offered: Spring

Equivalent Course(s): HIST 25208, HIPS 25208, HIST 35208

#### CHSS 35415. History of Information. 100 Units.

'Information' in all its forms is perhaps the defining phenomenon of our age. But although we tend to think of it as something distinctively modern, in fact it came into being through a long history of thought, practice, and technology. This course will therefore suggest how to think historically about information. Using examples that range from the Middle Ages to the twenty-first century, we shall explore how different societies have conceptualized the subject, and how they have sought to control it. We shall address how information has been collected, classified, circulated, contested, and destroyed. The aim is to provide a different kind of understanding of information practices—one that can be put to use in other historical inquiries, as well as casting an unfamiliar light on our own everyday lives. Instructor(s): A. Johns Terms Offered: Autumn

Equivalent Course(s): HIST 35415,LLSO 23501,HIST 25415

#### CHSS 37502. Energy and Energy Policy. 100 Units.

This course shows how scientific constraints affect economic and other policy decisions regarding energy, what energy-based issues confront our society, how we may address them through both policy and scientific study, and how the policy and scientific aspects can and should interact. We address specific technologies and the policy questions associated with each, as well as with more overarching aspects of energy policy that may affect several, perhaps many, technologies.

Instructor(s): S. Berry, G. Tolley Terms Offered: Autumn

Prerequisite(s): Third- or fourth-year standing. For ECON 26800: ECON 26500 and consent of instructor.

#### CHSS 42300. Scientific/Technological Change. 100 Units.

Equivalent Course(s): HIPS 20300

#### CHSS 43500. Do Ideas Evolve? 100 Units.

In the decades after Darwin, scholars from James to Simmel suggested that knowledge might evolve. The past 30 years have witnessed an explosion of related research, providing rigorous and empirically grounded theories of cultural and linguistic evolution. In this course, we will ask whether these insights extend to the world of ideas and knowledge. We begin by surveying key aspects of biological evolution. We then turn to cultural evolution, exploring issues like the units of selection and the mechanisms of cultural reproduction. We will spend the bulk of the course applying these insights to knowledge evolution. We will explore theories of innovation to assess where new ideas come from. We will investigate cognitive biases and heuristics to uncover regularities in the generation and selection of ideas. We will see how social context and economic incentives affect the "fitness" and fecundity of facts and theories. And we will develop an understanding of the interdependent "ecology" of ideas as constitutive of disciplinary formations. Where appropriate, we will introduce relevant empirical techniques. The course will be organized as a highly participatory seminar, focused on readings from diverse literatures. Students will also pursue projects of their own choosing in small groups. Instructor(s): J. Evans and J. Foster Terms Offered: Spring 2013 Equivalent Course(s): SOCI 40183, CDIN 43500



### DEPARTMENT OF ECONOMICS

#### Chair

- John List
  - Professors
- Fernando Alvarez
- · Gary S. Becker
- · Robert W. Fogel
- David W. Galenson
- Lars Peter Hansen
- · James J. Heckman
- Ali Hortaçsu
- Steven Levitt
- John List
- Robert E. Lucas, Jr.
- · Casey Mulligan
- · Kevin M. Murphy
- Roger B. Myerson
- Derek A. Neal
- Philip J. Reny
- Robert Shimer
- Hugo F. Sonnenschein
- · Nancy L. Stokey
- Harald Uhlig

Associate Professor

- Azeem Shaikh
   Assistant Professors
- · Thomas Chaney
- Brent Hickman
- Rafael Lopes de Melo
- Richard Van Weelden
- · Alessandra Voena
- E. Glen Weyl

Research Associates

- Alicia Menendez
- Robert Townsend
   Visiting Professors
- Kenneth Judd

- Peter Rossi
- Balázs Szentes

Visiting Associate Professor

· Michael Price

Visiting Assistant Professor

Oleg Itskhoki

Senior Lecturers

- Victor O. Lima
- Allen R. Sanderson
- Grace Tsiang

Lecturers

- · Sebastien Gay
- · Kotaro Yoshida

**Emeritus Faculty** 

- Arnold C. Harberger
- · Lester G. Telser
- George S. Tolley

OTHER ACADEMIC PERSONNEL

Lecturers and Instructors

- · Kathryn Ierulli
- Scott Duke Kominers

Post-Doctoral Fellows and Scholars

- · Remi Piatek
- Junjian Yi

Visiting Scholar

Zhang Helin Business School of Zhengzhou University

Chicago is a particularly innovative department of economics. The proportion of new ideas in economics that have emanated from or become associated with Chicago over the last forty years is astonishing. Any definition of the Chicago School would have to find room for the following ideas (in chronological order from the 1940s to the present): the economic theory of socialism, general equilibrium theory, general equilibrium models of foreign trade, simultaneous equation methods in econometrics, consumption as a function of permanent income, the economics of the household, the rationality of peasants in poor countries, the economics of education and other acquired skills (human capital), applied welfare economics, monetarism, sociological economics (entrepreneurship, racial discrimination, crime), the economics of invention and innovation, quantitative economic history, the economics of information, political economy (externalities, property rights, liability, contracts), the monetary approach to international finance, rational expectations in macroeconomics, and mechanism design. The unifying thread in all this is not

political or ideological but methodological, the methodological conviction that economics is an incomparably powerful tool for understanding society.

The Department of Economics offers a program of study leading to the Ph.D. degree. A general description of the program is given below. For a more detailed explanation of the program requirements, as well as complete course descriptions and faculty bios, see the information for current students on our website at: http://economics.uchicago.edu/graduate/.

The Department of Economics has no master's-level courses and does not admit students who intend to do only a master's degree. Ph.D. students may apply for and receive a master's degree after completion of a set of courses and examinations that they have taken as part of the doctoral program.

### ADMISSIONS AND FINANCIAL AID

### Prerequisites and Preparation for Graduate Study

Each autumn, the Department of Economics enrolls an entering class of approximately twenty-five to thirty-five graduate students who come from many countries around the world, and have been selected from a large and diverse group of applicants. Admission to graduate study requires a bachelor's degree (or equivalent). This degree need not be in economics, although some background in economics is certainly desirable. There are no formal course requirements for admission, but a strong background in mathematics is important. At the Ph.D. level, the study of economics requires an absolute minimum of one year of college calculus and a quarter (or semester) each of both matrix algebra and mathematical statistics (that is, statistics using calculus, as distinct from introductory statistics for social science). Prospective students who lack this preparation and have remaining free time in their undergraduate schedules are urged to take these courses before beginning graduate study.

Beyond these basic prerequisites, many of our applicants have taken other advanced mathematics courses, such as real analysis, have completed some graduate-level classes in economics or related fields, or have had some other significant exposure to research in economics. Many strong applicants have ranked at or near the top of their graduating class.

#### **ADMISSIONS PROCESS**

Given the year long sequence of courses, all new students must begin their study in the Autumn Quarter. The application process for admission and financial aid for Economics and all Social Sciences graduate programs is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines, and department specific information is available online at: https://apply-ssd.uchicago.edu/apply/. Most required supplemental material can be uploaded into the application.

Questions pertaining to admissions and aid should be directed to admissions@ssd.uchicago.edu or (773) 702-8415. All correspondence and those materials that cannot be uploaded into the application should be mailed to:

The University of Chicago Division of Social Sciences Admissions Office Foster 105 1130 East 59th Street Chicago, IL 60637

All applicants are required to submit scores from the Graduate Record Examination (GRE) General Test. Foreign applicants whose native language is not English must provide evidence of English proficiency by submitting scores from either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS). The current University minimum score requirements are provided with the application.

#### CRITERIA FOR ADMISSIONS

The Committee on Admissions takes account of a wide range of factors to evaluate each applicant: the previous educational record, letters of recommendation, writing sample, previous research experience, the applicant's scores on the GRE (General Test) and the TOEFL or IELTS, the compatibility of the applicant's research interests with the program strengths in the department, and any special factors that the applicant may bring to the committee's attention. The committee evaluates each applicant on the basis of all material available; no arbitrary cut-offs in terms of a student's grade point average or test scores are used. Applications must be complete for the January review, including scores from the GRE and TOEFL or IELTS if appropriate. These exams should be taken no later than November 1. In deciding when to register for the exams, applicants should particularly note our yearly cycle in order to assure that their applications receive full consideration.

### PROGRAM OF STUDY

The program of study for the Ph.D. degree in Economics includes courses and comprehensive examinations in the three "Core" subjects of Price Theory; the Theory of Income, Employment, and the Price Level; and Quantitative Methods. In addition to the Core, Ph.D. requirements include demonstration of competence in two Specialized Fields of concentration, courses in three elective Fields for the General Distribution requirement, a Research Paper, the approval of a Thesis Proposal, and the completion of the Doctoral Thesis.

The usual load is three courses per quarter for two years; this permits completion of nine courses during the regular academic year of three quarters. The comprehensive examination for the Core subjects is given in the Summer Quarter. An examination in each Specialized Field of concentration is given once a year.

Ph.D. students may request permission to choose electives outside the Department of Economics for Field or General Distribution requirements. Satisfactory grades on course work done at the graduate level at another institution may also be used to

satisfy part of the course requirements for General Distribution by petition to the Director of Graduate Studies.

With good preparation, students normally take five years to complete the Ph.D. Students who begin with the intention of obtaining the Ph.D. but who change their plans or fail to satisfy the Ph.D. requirements will in most cases be eligible for a M.A. degree.

The program of a typical Ph.D. student consists of the following sequence: in the first year, courses in price theory, the theory of income, and quantitative methods prepare the student for the Core examinations which are taken in the following summer; in the second year, courses and participation in workshops prepare the student for certification in two Specialized Fields (one by exam and one by GPA or exam) and help the student identify a Research Paper topic; in the third and fourth years, the student completes his/her Research Paper and General Distribution requirements, participates in workshops, formulates a thesis topic, and presents a Thesis Proposal Seminar at which the faculty formally approves the topic and admits the student to candidacy; in the fifth year, the student completes his/her Doctoral Thesis and gives a Public Lecture.

#### COURSES

The department website offers descriptions of graduate courses scheduled for the current academic year: http://economics.uchicago.edu/graduate/

# JOINT PH.D. PROGRAM IN FINANCIAL ECONOMICS

The joint Ph.D. program in Financial Economics was established in the 2006-07 academic year and is run jointly by the Department of Economics in the Division of the Social Sciences and by the University of Chicago Booth School of Business (formerly the GSB). The aim of this program is to exploit the strengths of both sponsors in training Ph.D. students interested in financial economics. Core economics training is valuable for students seeking to do research in financial economics, and advances in financial economics have important spillovers to other areas of economics. It has long been a tradition in the Department of Economics to feature core economics training for their Ph.D. students, and the Booth School has a well recognized excellence in finance. Students in the joint program benefit from broad sets of instructors and classmates in both the Economics Department and the Booth School. They also hold an official status and are able to utilize resources in both Economics and the Booth School.

Upon completion of this program, students will be awarded a Doctor of Philosophy degree in Economics and Finance jointly from the Division of the Social Sciences and the Booth School.

#### PROGRAM ELEMENTS

Students must satisfy the requirements for the Ph.D. degree in both programs. This is viable because of the considerable overlap in what the two programs expect of their students.

#### Admissions

Admission to the joint program requires admission to both the doctoral program in the Department of Economics and to the doctoral program in the Booth School, but interested parties need only apply to one or the other program. Students may enter the joint program at the beginning of their doctoral studies. Those seeking admission to the joint program should apply online to either the Ph.D. program in the Department of Economics or the Booth School.

Students enrolled in doctoral studies in either the Economics Department or the Booth School may apply to the joint program at any time within their first two years in residence. Such students will still have to meet all of the requirements of both programs.

Enrollment and financial aid throughout a student's matriculation in the joint program will be administered by either the Division of the Social Sciences or the Booth School, as arranged by the two units. This designation will be for administrative purposes only and will not have programmatic implications. If a student's interests change, the Director of the Ph.D. program in the Booth School and the Dean of Students for the Social Sciences will facilitate transfers out of the joint program and into the doctoral program in Economics or Business.

#### **ECONOMICS COURSES**

#### ECON 30100. PRICE THEORY I. 100 Units.

Theory of consumer choice, including household production, indirect utility, and hedonic indices. Models of the firm. Analysis of factor demand and product supply under competitive and monopolistic conditions. Static and dynamic cost curves, including learning by doing and temporary changes. Uncertainty applied to consumer and producer choices. Property rights and the effects of laws. Investment in human and physical capital.

Instructor(s): Kevin Murphy and Gary Becker Terms Offered: Autumn Equivalent Course(s): LAWS 43611

#### ECON 30200. PRICE THEORY II. 100 Units.

The first five weeks of this course are a continuation of ECON 30100, Price Theory I.

The second half of the course will be devoted to the Walrasian model of general competitive equilibrium as developed by Arrow and Debreu. This will begin with a brief development of the consumer and producer theories, followed by the welfare theorems connecting equilibria and optima and a treatment of the classical existence of equilibrium theorem. The core of an economy, a limit theorem relating the core to the set of competitive equilibria, and models in which agents are small relative to the market will also be considered. Finally we will study general equilibrium under some alternative assumptions; such as, informational asymmetries and rational expectations equilibrium, public goods and Lindahl equilibrium, financial general equilibrium and asset pricing.

Instructor(s): Gary Becker, Kevin Murphy, and Phil Reny Terms Offered: Winter Equivalent Course(s): LAWS 43621

#### ECON 30300. PRICE THEORY III. 100 Units.

The course begins with expected utility theory, and then introduces the fundamental ideas of game theory: strategic-form games, Nash equilibrium, games with incomplete information, extensive-form games, and sequential equilibrium. Then the course will focus on the effects of informational asymmetries in markets and the problems of moral hazard and adverse selection. Topics include: optimal risk sharing, signaling and screening in competitive markets, principal-agent problems, strategic and informational incentive constraints, incentive efficiency, and mechanism design for auctions and bilateral trading.

Instructor(s): Roger Myerson and Phil Reny Terms Offered: Spring

# ECON 30400. INTRODUCTION TO MATHEMATICAL METHODS IN ECONOMICS. 000 Units.

This optional three-week course for incoming graduate students meets September 4 through September 21 2012 and introduces some basic mathematical concepts used in economic theory: a "briefing" of the math students will encounter in the Core classes. Emphasis is placed on problem-solving, but also on some fairly abstract math you might not see otherwise. Cooperative work is strongly encouraged. Instructor(s): Victor O. Lima Terms Offered: September 4-September 21, 2012 Prerequisite(s): Econ PhD students only

#### ECON 30501. TOPICS IN THEORETICAL ECONOMICS. 100 Units.

Some of the topics covered in this course are: Nash equilibrium existence in discontinuous games, existence of monotone pure strategy equilibria in Bayseian games, defining sequential equilibrium in infinite extensive form games, efficient auction design, correlated information and mechanism design. Instructor(s): Phil Reny Terms Offered: Winter

#### ECON 30600. THE ECONOMICS OF INFORMATION. 100 Units.

This course introduces students to a range of economic tools used to study models explicitly involving strategic behavior, information transmission, and contracting in economics and finance. The intention is to prepare the student to conduct research using these tools. Techniques studied include agency theory, signaling models, and sequential games of incomplete information. In addition, some applications of the tools will be covered. The approach is rigorous and analytical. First class assignment: purchase the required materials, read the syllabus (with special attention to the section on prerequisites), and read the article "Moral Hazard and Observability" by Bengt Holmström (*Bell Journal*, spring 1979) which can be downloaded from JSTOR. The syllabus is available on the "Booth Syllabi" link on Chalk: https://chalk8.uchicago.edu/webapps/portal/frameset.jsp?tab\_id=\_11\_1 Instructor(s): Milton Harris Terms Offered: Autumn

Prerequisite(s): PQ: ECON 30100 and 30200

Equivalent Course(s): BUSF 33911

#### ECON 30701. EVOLUTIONARY GAME THEORY. 100 Units.

The goal of this course is to give an introduction to Evolutionary Economics with a particular focus on the evolution of preferences. The topics covered in this course include altruism, risk-preferences, discounting, happiness and social norms. Instructor(s): Balazs Szentes Terms Offered: Spring

#### ECON 31000, EMPIRICAL ANALYSIS I, 100 Units.

This course introduces students to the key tools of econometric analysis. It covers basic OLS regression model, generalized least squares, asymptotic theory and hypothesis testing for maximum likelihood estimation, extremum estimators, instrumental variables, decision theory and Bayesian inference.

Instructor(s): Azeem Shaikh and Peter Rossi Terms Offered: Autumn

#### ECON 31100. EMPIRICAL ANALYSIS II. 100 Units.

This course develops methods of analyzing Markov specifications of dynamic economic models. Models with stochastic growth are accommodated and their properties analyzed. Methods for identifying macroeconomic shocks and their transmission mechanisms are developed. Related filtering methods for models with hidden states are studied. The properties estimation and inference methods based on maximum likelihood and generalized method of moments are derived. These econometric methods are applied to models from macroeconomics and financial economics

Instructor(s): Lars Hansen Terms Offered: Winter

#### ECON 31200. EMPIRICAL ANALYSIS III. 100 Units.

The course will review some of the classical methods you were introduced to in previous quarters and give examples of their use in applied microeconomic research. Our focus will be on exploring and understanding data sets, evaluating predictions of economic models, and identifying and estimating the parameters of economic models. The methods we will build on include regression techniques, maximum likelihood, method of moments estimators, as well as some non-parametric methods. Lectures and homework assignments will seek to build proficiency in the correct application of these methods to economic research questions.

Instructor(s): Derek Neal and Peter Rossi Terms Offered: Spring

#### ECON 32000. Topics in American Economic History. 100 Units.

Economic analysis is applied to important issues in American economic history. Specific topics vary, but may include the following: the economics of colonization, the transatlantic slave trade, the role of indentured servitude and slavery in the colonial labor market, the record and sources of 19th-century economic growth, economic causes and effects of 19th-century immigration, the expansion of education, the economics of westward migration, determinants of long-run trends in the distribution of income and wealth, the quantitative analysis of economic and social mobility, and the economics of racial discrimination in the twentieth-century South.

Instructor(s): David W. Galenson Terms Offered: Winter

Equivalent Course(s): ECON 22200

#### ECON 32200. Population and the Economy. 100 Units.

This course deals with the effects of swings in population on the stability of the economy and on business opportunities. In both the short run and the medium run, shifts in the demographic rates, including migration, probably have been more destabilizing than unwise macroeconomic policy or abrupt political realignments. Population change thus constitutes a major challenge to policy makers in business and in government. Topics covered include: the effects of demographic changes on markets for labor and capital, on savings rates and the structure of investment, on pensions and health care costs, on taxes and government expenditures, on household behavior, and economic development. Several weeks of the course will contain student presentations, covering seminal work in the field and cutting-edge research papers. The grade for this course is based on an in-class presentation and written summary, a midterm, and a final examination.

Instructor(s): C. Hoyt Bleakley & Robert W. Fogel Terms Offered: Autumn

 $\label{eq:pre-pre-quisite} Pre-equisite(s): PQ: BUSF 33001 \ or \ the \ equivalent.$ 

Equivalent Course(s): BUSF 33470, ECON 22500

#### ECON 33000. THE THEORY OF INCOME I. 100 Units.

This course will use dynamic general equilibrium models to study macroeconomic questions. The first half of the quarter will focus on applications of the neoclassical growth model, including variants useful for studying the effects of capital, labor, and consumption taxes; the effects of general and investment specific technical change; the role of human capital accumulation, and the q-model of investment. On the technical side, this part of the course will rely heavily on the tools of optimal control theory (Hamiltonians) and on the First and Second welfare theorems. The second part of the course will focus on applications of stochastic dynamic programming. On the substantive side, particular topics include models of job search and asset pricing; models with idiosyncratic (insurable) and aggregate (uninsurable) risk; and dynamic tax smoothing. On the technical side, this part of the course will rely heavily on Bellman equations and other recursive modeling techniques.

Instructor(s): Nancy Stokey Terms Offered: Autumn

#### ECON 33100. THE THEORY OF INCOME II. 100 Units.

This course will explore a variety of macroeconomic models in which the welfare theorems do not necessarily hold, including overlapping generations models, equilibrium models with labor market search and matching frictions, economies with sticky prices and sticky wages, and environments in which money facilitates exchange. We will also explore the role of government policy within these models, including optimal taxation, optimal monetary policy, and the time consistency of these policies. If time permits, we will look at environments with non-convex adjustment costs, such as irreversible investment and fixed costs of changing prices. Instructor(s): Robert Shimer Terms Offered: Winter

#### ECON 33200. THE THEORY OF INCOME III. 100 Units.

The course shares with the other two Theory of Income courses the objectives of (1) explaining human behavior as evidenced by aggregate variables and (2) predicting the aggregate effects of certain government policies. Economics 33200 considers some of the prevailing business cycle theories, and their application to the recession of 2008-9. Some hypotheses to be considered are the q-theory of housing investment, the neoclassical approach to fiscal policy, and whether government spending has a "multiplier." The course confronts several empirical issues that are also encountered outside the field of macroeconomics such as the construction of aggregate data, choice of data set, and the measurement of expectations.

Instructor(s): Casey Mulligan Terms Offered: Spring

#### ECON 34300. HUMAN CAPITAL. 100 Units.

This course covers both micro and macro aspects of human capital: investments by parents in the education and other human capital of their children, intergenerational transmission of inequality, links between specializations in particular types of human capital and coordination costs, general knowledge, and the extent of the market. The relation between human capital, population change, and economic growth is also emphasized.

Instructor(s): Gary Becker Terms Offered: Spring

Equivalent Course(s): SOCI 30306

#### ECON 34702. AGGREGATE LABOR MARKET DYNAMICS. 100 Units.

This course will examine recent research at the intersection of Macroeconomics and Labor Economics. The first part of the course will look at the determinants of business-cycle-frequency fluctuations in employment and hours worked. We will ask whether search models are capable of addressing empirical inconsistencies in market-clearing models of the labor market. We will also examine how these models can be used to study worker mobility across geographic or occupational sectors of the economy. The second part of the course will study the determinants of long-run, cross-country differences in employment and hours worked. We will examine the role played by differences in taxes, unemployment insurance, and firing costs. The emphasis throughout the course will be on the use of empirically grounded general equilibrium models to address the key determinants of labor market outcomes. Instructor(s): Robert Shimer Terms Offered: Autumn

#### ECON 34901. SOCIAL INTERACTIONS AND INEQUALITY. 100 Units.

This course will focus on the theory, econometrics, and empirical analysis of social influences on economic behavior, termed social interactions. As such, the course will include topics ranging from social networks to social capital to discrimination. We will examine the effects of social interactions on individual and aggregate behaviors as well as the implications of social interactions for the formation of social structure. Particular attention will be given to the translation of theoretical models into econometric analogs and to the identification questions that arise when attempting to construct empirical evidence on social interactions. Applications of social interactions will focus on contexts in which their presence can help explain observed levels of socioeconomic inequality.

Instructor(s): Staff Terms Offered: Spring

#### ECON 35002. THE ORIGINS AND CONSEQUENCES OF INEQUALITY IN **CAPABILITIES. 100 Units.**

This course examines the trends and sources of inequality. It focuses on human capital broadly defined as a vector of skills, preferences, and personality traits. It examines the origins of these capabilities; the role of markets, family investment, social interactions, and heritability-in explaining inequality in wages, health, education, participation in risky activities, crime, labor supply, and a variety of other behaviors using a unified approach. We consider inter- and intra- generational mobility in earnings, health and other dimensions of social position and economic status. The course considers, among other topics, life cycle models of skill acquisition, self-control, and preference formation, as well as gene-environment interactions and the influence of inequality on capability formation. Economic models and econometric tools will be developed as required.

Instructor(s): James Heckman Terms Offered: Winter

#### ECON 35101. INTERNATIONAL MACROECONOMICS & TRADE. 100 Units.

This course is the first in a three course sequence on international economics. The first part is reserved to international trade and will involve a mix of theory, data, and computation. After studying the workhorse models (including classical models of trade, models with increasing returns and monopolistic competition, and recent models with heterogeneous firms), we will cover their recent quantitative applications. The second part is on international macroeconomics and focuses on international relative prices and exchange rates. In particular, we will cover price-related puzzles, such as PPP puzzle and exchange rate disconnect, study the recent work on incomplete pass-through and pricing-to-market, as well as models of real and nominal exchange rate under flexible and sticky prices.

Instructor(s): Kerem Cosar and Oleg Itskhoki Terms Offered: Autumn Equivalent Course(s): BUSF 33946

#### ECON 35200, TOPICS IN ECONOMIC GROWTH, 100 Units.

This course is the second in a three-course sequence on economic growth and international trade. It will examine models of economic growth, focusing on questions where international trade, international comparisons, and the diffusion of technologies across international boundaries play a role. In particular, we will look at: explanations of cross-country differences in productivity levels, the role of financial development and the misallocation of factors in explaining those differences, cross-country differences in growth rates and the role of technology diffusion. Related theoretical work—models of innovation (R&D) and of structural transformation—will also be examined.

Instructor(s): Nancy Stokey Terms Offered: Winter

#### ECON 35301. INTERNATIONAL TRADE AND GROWTH. 100 Units.

This course is the last in a three course sequence on Economic Growth and International Trade. We will focus on recent research related to trade, growth, and technology diffusion. Papers by Eaton and Kortum, Alvarez, Buera, Lucas, Prescott, McGrattan and Jovanovic will be reviewed, as well as work by Sachs and Warner, Stokey, Grossman and Helpman, Rossi-Hansberg, and Klenow and Rodriguez-Clare.

Instructor(s): Robert Lucas Terms Offered: Spring

#### ECON 36101. ECONOMIC MODELS OF POLITICS. 100 Units.

This course is an introduction to current research in political economics. The emphasis is on game-theoretic models that can be used to study the effects of different constitutional structures on the competitive behavior of politicians and the welfare-relevant performance of government.

Instructor(s): Roger Myerson and Richard van Weelden Terms Offered: Winter

#### ECON 36200. PUBLIC SECTOR ECONOMICS. 100 Units.

The concept of "market distortion" is used to formulate measurements, explanations, and consequences of government activities including tax systems, expenditure programs, and regulatory arrangements. Topics include cross-country comparisons of government behavior, predicting microlevel responses to policy, measuring and evaluating the incidence of government activity, alternative models of government decision-making, and the application of public finance to other economics fields. Instructor(s): Casey Mulligan Terms Offered: Autumn

#### ECON 36301, PUBLIC ECONOMICS, 100 Units.

This course covers areas of active empirical research on the design and effects of taxes and government spending. The areas covered are welfare economics, income taxation and labor supply, optimal income taxation, the effects of welfare and social insurance programs including AFDC/TANF, social security, unemployment insurance, workers' compensation, and disability insurance. While the emphasis is primarily empirical, the course begins each topic with the main theoretical work in that area.

Instructor(s): Bruce Meyer Terms Offered: Spring

Equivalent Course(s): PPHA 44000

# ECON 37403. RESEARCH SEMINAR ON THE QUANTITATIVE STUDY ON INEQUALITY. 100 Units.

This course examines the counter-factual analysis of inequality and social policy. Basic econometric tools will be developed including dynamic models of discrete choice.

Instructor(s): James Heckman Terms Offered: Spring

Equivalent Course(s): PPHA 48410

# ECON 38001. APPLIED MACROECONOMICS: MICRO DATA FOR MACRO MODELS. 100 Units.

This course considers the use of data on households, workers, producers and media sources in research on consumption behavior, labor market fluctuations, business dynamics and other areas of macroeconomics. A key goal is to help students develop the ability to identify interesting research questions and devise promising research strategies. Topics include life cycle consumption behavior, home production and time use, housing market dynamics, wage rigidities and their consequences, unemployment fluctuations, employer behavior on the hiring margin, entrepreneurship, and economic policy uncertainty. Lectures treat a mix of important, well-established research contributions and new, often rough, papers that seek to advance the frontier. Homework assignments aim to build proficiency in the use of micro data to address macroeconomic issues, expose students to a variety of useful data sources, and give them first-hand experience in identifying and evaluating research questions and strategies.

Instructor(s): Steven Davis and Erik Hurst Terms Offered: Autumn

Equivalent Course(s): BUSF 33942

#### ECON 38301. APPLIED MACROECONOMICS II. 100 Units.

This course consists of two components. There are five weeks of lectures on stochastic dynamic equilibrium models with financial market linkages. The impact of financing frictions on the macroeconomic transmission mechanism and on the asset markets will be considered. Also the impact of uncertainty is analyzed through the lens of recent literatures on ambiguity aversion and concerns for robustness. The class explores emerging literatures designed to confront empirical challenges and quantitative predictions. For the second part of the class students are required to attend lectures by outside scholars: Violante, Piazzessi, Primiceri and Bloom on a variety of important topics in macroeconomics. Each will give one lecture to a broad audience of graduate students and some faculty. Students are asked to write short essays (say referee reports) on two papers that are prominently referenced in these lectures.

Instructor(s): Lars Hansen Terms Offered: Autumn

Equivalent Course(s): BUSF 33947

#### ECON 38401. APPLIED MACROECONOMICS II. 100 Units.

This course focuses on models of decentralized trade applied both to labor and financial markets, which may be affected by search and informational frictions. Among other things, we will focus on understanding financial crises and their macroeconomic effects. We will discuss how illiquidity may be generated by trading informational frictions and the effects of deleveraging of households and firms on economic activity and unemployment.

Instructor(s): Veronica Guerrieri Terms Offered: Spring

Equivalent Course(s): BUSF 33948

#### ECON 38900. THEORY OF FINANCIAL DECISIONS I. 100 Units.

This course is concerned with models for portfolio decisions by investors and the pricing of securities in capital markets. The material is covered in a rigorous analytical manner, although formal technical requirements are minimal. The reading list is extensive. The expectation is that the average student spends 15+ hours per week on the course, outside of class. Grades are based on weekly take-home exam questions, about five problem sets, and a term paper. Class participation (I cold call) is also used to determine grades. Cannot be taken pass/fail or audited.

This course is intended for (i) first-year Booth Ph.D. students with no finance and (at best) undergraduate economics and statistics backgrounds, and (ii) second-year MBA students with rather minimal economics and statistics backgrounds. Students with stronger backgrounds in economics and statistics are likely to find the pace of the course, and the exam and problem set requirements, somewhat tedious. Such students are better served by the Booth Ph.D. Asset Pricing courses offered by Cochrane, Constantinides, and Heaton.

Instructor(s): Eugene Fama Terms Offered: Autumn

Prerequisite(s): Written proof of permission from the Instructor to enroll in this class is required at the time of registration. Attendance at the first class is mandatory. Equivalent Course(s): BUSF 35901

#### ECON 39001. THEORY OF FINANCIAL DECISIONS II. 100 Units.

This course provides a theoretical and empirical treatment of major topics in corporate finance, including: capital structure and financial contracting; investment decisions; bankruptcy; and the market for corporate control. The course is designed for Ph.D. students interested in corporate finance. Grades will be based on problem sets, referee reports, and a final examination.

Instructor(s): Douglas Diamond, Raghuram Rajan and Amir Sufi Terms Offered: Winter

Prerequisite(s): ECON 38900 / BUSF 35901

Equivalent Course(s): BUSF 35902

#### ECON 39101. ASSET PRICING. 100 Units.

In this course, we develop the theory of financial markets. Topics: review of mean-variance portfolio theory and the CAPM; arbitrage and state prices; the arbitrage pricing theory (APT); intertemporal consumption-investment decisions; the intertemporal capital asset pricing model (ICAPM) and the intertemporal APT; the econometrics of multifactor models; present value relations; equilibrium asset pricing models and the equity premium puzzle; explanations based on preferences, incomplete markets, imperfect markets, and rare events; introduction to stochastic calculus; option pricing; intertemporal consumption-investment decisions and asset pricing in continuous time; the term structure of interest rates.

Materials required will include: S. Bhattacharya and G. M. Constantinides (editors), *Theory of Valuation* (World Scientific). J. Y. Campbell, A. W. Lo, and A. C. Mackinlay, *The Econometrics of Financial Markets* (Princeton). J. Cochrane, *Asset Pricing* (Princeton). J. E. Ingersoll, *Theory of Financial Decision Making* (Rowman and Littlefield). CoursePack of readings.

Grades will be based on class participation, homework, and a final examination in class. Students are expected to read the assigned materials in advance, participate in the class discussion, and work on extensive problem sets.

Instructor(s): George Constantinides Terms Offered: Autumn

Prerequisite(s): BUSF 35100 and BUSF 35901

Equivalent Course(s): BUSF 35912

#### ECON 39200. TOPICS IN EMPIRICAL FINANCE. 100 Units.

The central question of empirical finance is "what are the real sources of aggregate risk that determine asset prices?" This course focuses on current topics in empirical finance that address this question. It explores this question by providing a synthesis of asset pricing and macroeconomic theory. The emphasis is on the stochastic discount factor framework for thinking about asset pricing, and the course spends some time exploring this framework and relating it to traditional expected returnbeta statements of asset pricing models. Methods for analyzing the term structure of risk exposures and prices across alternative investment horizons are developed. Econometric challenges are explored. Finally, the effects of investor preferences and individual heterogeneity and frictions in asset markets on equilibrium stochastic discount factors are analyzed.

Instructor(s): Lars Hansen and Stefano Giglio Terms Offered: Winter

Equivalent Course(s): BUSF 35905

#### ECON 39400. THEORY OF FINANCIAL DECISIONS III. 100 Units.

We plan to cover three broad topics in this course: (1) theory of the firm; (2) the development of financial markets and its effects on real markets; and (3) financial intermediaries. We will start by trying to understand why firms exist. This will naturally lead on to questions about their organizational and control structures and about the way they are financed. Financial intermediaries play a key role in financing and we will attempt to understand why they are useful. Among the topics we will examine are the effects of financial contracts and intermediaries on incentives, commitment, and the liquidity of markets and the chance of a financial crisis.

This course is intended for Ph.D. students and advanced M.B.A. students who have a substantial understanding of formal economics and some basic game theory. Grades will be based on problem sets, referee reports and a final examination. Instructor(s): Douglas Diamond and Luigi Zingales Terms Offered: Spring Prerequisite(s): ECON 39001 / BUSF 35902. A solid background in advanced microeconomics is highly recommended.

Equivalent Course(s): BUSF 35903

#### ECON 39600, TOPICS IN ASSET PRICING, 100 Units.

This course covers topics in the area of dynamic asset pricing, including standard complete market models, incomplete markets, portfolio constraints and transaction costs, learning and uncertainty, asymmetric information and other recent developments such as non-time additive preferences. The course will also cover selected topics in the area of derivative pricing and term structure models.

Instructor(s): Pietro Veronesi Terms Offered: Spring

Equivalent Course(s): BUSF 35907

#### ECON 39802. ADVANCED LAW AND ECONOMICS. 100 Units.

This seminar examines theoretical and empirical work in the economic analysis of law. It will cover, among other things, optimal tort rules, models of contract liability and remedies, optimal criminal rules, settlement and plea bargaining, and models of judicial behavior. Familiarity with calculus and either advanced undergraduate microeconomics or graduate microeconomics is expected. Grades will be based on class participation and a series of research paper proposals.

Instructor(s): Anup Malani Terms Offered: Spring

Equivalent Course(s): LAWS 55401

#### ECON 40101. ADVANCED INDUSTRIAL ORGANIZATION I. 100 Units.

This two-quarter sequence is part of the Industrial Organization Specialized Field taught jointly at the Ph.D. level in the Department of Economics and the Booth School of Business. Topics include modeling consumer demand, production function estimation, static and dynamic models of imperfect competition, pricing strategies, theory of the firm and organizational design. Recent theoretical and empirical approaches are emphasized.

Instructor(s): Chad Syverson Terms Offered: Autumn

Prerequisite(s): PQ: Solid background in first year Ph.D. level microeconomics and econometrics, e.g., ECON 30100, 30200, or 30300 and ECON 31000, 31100, or 31200. Equivalent Course(s): BUSF 33921

#### ECON 40201. ADVANCED INDUSTRIAL ORGANIZATION II. 100 Units.

This two-quarter sequence is part of the Industrial Organization Specialized Field taught jointly at the Ph.D. level in the Department of Economics and the Booth School of Business. Topics include modeling consumer demand, production function estimation, static and dynamic models of imperfect competition, pricing strategies, theory of the firm and organizational design. Recent theoretical and empirical approaches are emphasized.

Instructor(s): Ali Hortacsu Terms Offered: Winter

Prerequisite(s): . PQ: Solid background in first year Ph.D. level microeconomics and econometrics, e.g., ECON 30100, 30200, or 30300 and ECON 31000, 31100, or 31200. Equivalent Course(s): BUSF 33922

#### ECON 40301. ADVANCED INDUSTRIAL ORGANIZATION III. 100 Units.

This course will complement the other courses in the Ph.D. sequence for industrial organization and will focus on topics closely related to antitrust economics and regulation. Topics will include optimal price discrimination, bundling, tie in sales, price fixing, two sided markets including credit cards, the theory of optimal regulation, and the empirical facts of regulation. The course is primarily for PhDs in economics and business, but advanced law students interested in antitrust and regulation plus advanced and interested MBAs are welcome.

Instructor(s): Dennis Carlton Terms Offered: Spring Equivalent Course(s): BUSF 33923,LAWS 99304

#### ECON 40501. PRICE THEORY AND MARKET DESIGN. 100 Units.

This course teaches students to apply the classical tools of price theory in the Marshallian tradition to provide simple and elegant treatment of a range of economic problems typically considered to be on the frontiers of empirical and theoretical microeconomics. We will focus particularly on applications to the efficient design of market institutions, including, but not limited to, procedures for allocating private goods efficiently and equitably, determining the appropriate level of public goods and ensuring markets remain competitive while encouraging beneficial innovation. While the course will cover a wide range of challenging applications, a primary goal will be to develop an appreciation among students for the underlying analytic unity of the field and an ability to convey economic ideas with a minimum of technical formalism and maximal clarity.

Instructor(s): G. Weyl Terms Offered: Autumn

Prerequisite(s): Econ 20100/20110 and Stat 23400/24400

Equivalent Course(s): ECON 42410

#### ECON 40701. TOPICS IN MATCHING AND MARKET DESIGN. 100 Units.

This course is a reading seminar on the theory and practice of market design. The first few weeks will introduce the field and its technology; subsequent weeks will discuss recent papers alongside their classical antecedents. In addition to technical content, class discussion will pay special attention to issues of problem identification and formulation, so as to understand what comprises "interesting" work in market design. Topics may include: spectrum reassembly, cadet-branch matching, affirmative action, large-market matching, kidney exchange chains, real property, and the design of dating websites.

Instructor(s): Scott Kominers Terms Offered: Spring

# ECON 40801. INTRODUCTION TO THEORY-BASED EMPIRICAL METHODS WITH APPLICATIONS TO MARKET DESIGN. 100 Units.

This course will concentrate on identification and estimation of static models related to market design, but may also serve as an introduction to structural research in general. As a rough outline, the first segment will cover single-object auction models, the second segment will cover multi-object auction models, and the final segment will cover related settings including contracts, adverse selection models, rank-order contests, and matching markets. Lectures will briefly cover theoretical background of various models so as to facilitate an in-depth discussion of topics such as model identification within different informational environments, unobserved heterogeneity, estimation techniques, and counterfactual experiments. Class assignments will include empirical exercises, a referee report, and in-class presentations on recent research of interest to class members.

Instructor(s): Brent Hickman Terms Offered: Winter

#### ECON 41800. NUMERICAL METHODS IN ECONOMICS. 100 Units.

This course introduces a broad range of numerical methods, and shows how to use them to compute equilibrium in competitive and game theoretic models and compute econometric estimators. Applications will include solution of dynamic stochastic general equilibrium models, life-cycle dynamic programming problems, optimal taxation, nonlinear pricing, Nash equilibrium of dynamic games, and estimation of structural models. We will also introduce students to advanced computational tools, such as cluster computing and supercomputing; in particular, students will get accounts on supercomputers.

Instructor(s): Ken Judd Terms Offered: Autumn

# ECON 41903. Computational Econometrics: Bringing Economics to Data. 100 Units.

The objective of this class is to equip students with the required computational skills that allow them to implement meaningful economic models in their quantitative research. We aim to put them in a position to develop their own econometric toolkit which is tailored to their research needs. The course consists of three parts. We begin by reviewing basic programming methods that enable computation intensive, high quality research. Then, we show the usefulness of these techniques for two common econometric models. First, we implement alternative estimation strategies for the static selection model. And second, we turn to the estimation of dynamic economic models.

Instructor(s): James Heckman Terms Offered: Winter

# ECON 42100. AN INTRODUCTION TO DOING EMPIRICAL MICROECONOMIC RESEARCH. 100 Units.

This course is designed to give students early in their graduate careers exposure to carrying out their own empirical micro-focused research. Attention will be paid to every step in the process: idea generation, the use of data, identifying the right tools to answer the question at hand, testing hypotheses, making arguments convincing, etc. These issues will be discussed through evaluation of both outstanding papers in the literature, and papers that fail to achieve their full potential. Students will be expected to carry out their own original empirical research to meet the course requirements.

Instructor(s): Steven Levitt Terms Offered: Winter

Equivalent Course(s): LAWS 99303

#### ECON 42410. PRICE THEORY AND MARKET DESIGN. 100 Units.

This course teaches students to apply the classical tools of price theory in the Marshallian tradition to provide simple and elegant treatment of a range of economic problems typically considered to be on the frontiers of empirical and theoretical microeconomics. We will focus particularly on applications to the efficient design of market institutions, including, but not limited to, procedures for allocating private goods efficiently and equitably, determining the appropriate level of public goods and ensuring markets remain competitive while encouraging beneficial innovation. While the course will cover a wide range of challenging applications, a primary goal will be to develop an appreciation among students for the underlying analytic unity of the field and an ability to convey economic ideas with a minimum of technical formalism and maximal clarity.

Instructor(s): G. Weyl Terms Offered: Autumn

Prerequisite(s): Econ 20100/20110 and Stat 23400/24400

Equivalent Course(s): ECON 40501

#### ECON 42800. Creativity. 100 Units.

This seminar examines recent research on how creative people innovate in a wide range of intellectual activities. The main project for the course is a term paper that analyzes the creative life cycle of one or more innovators of the student's choice, using both quantitative and qualitative evidence. Students present their research in progress for discussion. The seminar is designed to give students all the tools needed to do this research, including choosing a subject, finding and using an appropriate data set, and negotiating the relevant scholarship.

Instructor(s): D. Galenson Terms Offered: Winter Prerequisite(s): ECON 19800 or consent of instructor

Equivalent Course(s): ECON 22650

#### ECON 42900. Innovators. 100 Units.

Economists believe that innovation is a primary source of economic growth. Yet although most innovations are made by individuals or small groups, until recently economists have not studied how those exceptional people produce their discoveries. Recent research has shown that there are two very different types of innovators, who have different goals and follow different processes. This course surveys this research, examining the careers and innovations of important practitioners in a range of modern arts, including painters, novelists, sculptors, poets, movie directors, photographers, songwriters, and architects, as well as entrepreneurs and scientists. The material covered in this course adds a new dimension to our understanding of creativity and of how innovators in many different activities produce new forms of art and science.

Instructor(s): D. Galenson Terms Offered: Autumn

Prerequisite(s): Econ 20100

Equivalent Course(s): ECON 22600

#### ECON 49900. INDIVIDUAL RESEARCH. 100 Units.

For Required Research Paper: to be arranged between individual faculty and students – see Time Schedule for faculty Section Numbers.

Instructor(s): Faculty Terms Offered: Autumn, Winter, Spring



# COMMITTEE ON Geographical Studies

#### Professors

- Michael P. Conzen
- Neil Harris, History
- Marvin W. Mikesell Associate Faculty
- Virginia Parks, Social Service Administration
- Todd Schuble, Manager of GIS Research/Lecturer Emeritus Faculty
- Gerald Suttles, Sociology

The Committee on Geographical Studies offers course work and research opportunities for graduate students in the University. Students from many degree programs in different divisions work through the committee for specialized training. The committee does not admit students for degree work.

Unique resources for geographical research exist both at the University and in the Chicago area. On campus, the Joseph Regenstein Library contains a geography monograph collection considered one of the four best in the world; a main map collection of over a quarter of a million maps covering all regions of the globe; and over 1,000 geography serial titles from all over the world. Among the holdings in the distinguished John Crerar Science Library are significant materials on the environment in general, agriculture, land use, housing, social welfare, and urban growth in Europe and the United States. Area research centers at the University devoted to the Middle East, East Asia, South Asia, Slavic regions, and Latin America provide further specialist interdisciplinary research opportunities, some including additional library collections.

Among the major libraries and museums in the Chicago area, the Newberry Library has special strength in American local materials and is home to the Hermon Dunlap Smith Center for the History of Cartography with its world class collection of antique and historical maps. Research and policy organizations, such as the Northeastern Illinois Planning Commission and Chicago Area Transportation Study, maintain specialized libraries and data repositories, and from time to time offer internship opportunities.

Students who wish to inquire further about the Committee on Geographical Studies should write or call: Chair, Committee on Geographical Studies, The University of Chicago, 5828 South University Avenue, Chicago, IL 60637, telephone: (773) 702-8301.

### FIELDS OF STUDY

The principal objectives of the committee are the investigation of the organization of area, exploration of the earth environment and of its interactions with human life,

and inquiry into the geographical dimensions of cultures and societies. The research interests of the committee's faculty include:

#### URBAN ORGANIZATION AND CHANGE

Urban origins; the evolution of urban networks and systems of cities, ancient and modern, western and non western; the changing spatial structure, social organization, and morphology of urban areas; problems of urban allocation and planning; regionalism in American urban life; emergence of new metropolitan and non metropolitan settlement patterns in advanced societies.

#### REGIONAL STUDIES

Historical and thematic approaches to regional structure, particularly of North America and the Middle East; theory of the region; the origin and development of regional character; locality and place making; nature and culture in regional settings; comparative study of regions.

#### CULTURAL FOUNDATIONS OF NATION BUILDING

The ethno religious bases of the nation state; evolving regionalism and culture; the geographical significance of territoriality; national and regional boundary conflicts; minorities and cultural autonomy; linguistic policies of the state; multicultural development strategies; international and transnational management of ethnic conflict; cultural roots of self determination.

#### LANDSCAPE STUDIES

Landscape as an embodiment and shaper of social values and attitudes towards environment; theories of landscape structure and change; the historical development and regional construction of landscapes; thematic landscapes; the role of institutions in environmental design and management; aesthetic landscape values; landscape and the sense of place; comparative landscape analysis.

#### COURSES

The following list is representative of courses which have been offered by committee faculty members in recent years. Individualized reading and research courses on topics of faculty expertise may be arranged as well. The committee also maintains information on related courses in other disciplines.

#### GEOGRAPHICAL STUDIES COURSES

#### GEOG 30100. Cultural Geography. 100 Units.

This course examines the two main concerns of this field of geography: (1) the logic and pathology revealed in the record of the human use and misuse of the Earth, and (2) the discordant relationship of the world political map with more complicated patterns of linguistic and religious distribution.

Instructor(s): M. Mikesell Terms Offered: Winter Equivalent Course(s): GEOG 20100,ENST 25900

#### GEOG 31900. Historical Geography of the United States. 100 Units.

This course examines the spatial dynamics of empire, the frontier, regional development, the social character of settlement patterns, and the evolution of the cultural landscapes of America from pre-European times to 1900. All-day northern Illinois field trip required.

Instructor(s): M. Conzen Terms Offered: Autumn

Note(s): This course offered in even years.

Equivalent Course(s): GEOG 21900, HIST 28800, HIST 38800

#### GEOG 32100. Changing America in the Twentieth Century. 100 Units.

This course explores the regional organization of U.S. society and its economy during the pivotal twentieth century, emphasizing the shifting dynamics that explain the spatial distribution of people, resources, economic activity, human settlement patterns, and mobility. We put special focus on the regional restructuring of industry and services, transportation, city growth, and cultural consumption.

Two-day weekend field trip to the Mississippi River required.

Instructor(s): M. Conzen Terms Offered: Winter

Note(s): This course offered odd years.

Equivalent Course(s): GEOG 22100, HIST 27506, HIST 37506

#### GEOG 32700. Urban Structure and Process. 100 Units.

This course reviews competing theories of urban development, especially their ability to explain the changing nature of cities under the impact of advanced industrialism. Analysis includes a consideration of emerging metropolitan regions, the microstructure of local neighborhoods, and the limitations of the past U.S. experience as a way of developing worldwide urban policy.

Instructor(s): F. Stuart Terms Offered: Winter

Equivalent Course(s): SOCI 20104, CRES 20104, GEOG 22700, SOCI 30104, SOSC 25100

#### GEOG 35300. Urban Geography. 100 Units.

This course examines the spatial organization and current restructuring of modern cities in light of the economic, social, cultural, and political forces that shape them. It explores the systematic interactions between social process and physical system. We cover basic concepts of urbanism and urbanization, systems of cities urban growth, migration, centralization and decentralization, land-use dynamics, physical geography, urban morphology, and planning. Field trip in Chicago region required.

Instructor(s): M. Conzen Terms Offered: Winter

Note(s): This course offered in even years.

Equivalent Course(s): GEOG 23500

#### GEOG 35500. Biogeography. 100 Units.

This course examines factors governing the distribution and abundance of animals and plants. Topics include patterns and processes in historical biogeography, island biogeography, geographical ecology, areography, and conservation biology (e.g., design and effectiveness of nature reserves).

Instructor(s): B. Patterson (odd years, lab). L., Heaney (even years, discussion) Terms Offered: Winter

Prerequisite(s): Completion of the general education requirement in the biological sciences and a course in either ecology, evolution, or earth history; or consent of instructor

Equivalent Course(s): BIOS 23406, ENST 25500, EVOL 45500, GEOG 25500

#### GEOG 36100. Roots of the Modern American City. 100 Units.

This course traces the economic, social, and physical development of the city in North America from pre-European times to the mid-twentieth century. We emphasize evolving regional urban systems, the changing spatial organization of people and land use in urban areas, and the developing distinctiveness of American urban landscapes. All-day Illinois field trip required.

Instructor(s): M. Conzen Terms Offered: Autumn

Note(s): This course offered in odd years.

Equivalent Course(s): GEOG 26100, ENST 26100, HIST 28900, HIST 38900

#### GEOG 36600. Economics of Urban Policies. 100 Units.

This course covers tools needed to analyze urban economics and address urban policy problems. Topics include a basic model of residential location and rents; income, amenities, and neighborhoods; homelessness and urban poverty; decisions on housing purchase versus rental (e.g., housing taxation, housing finance, landlord monitoring); models of commuting mode choice and congestion and transportation pricing and policy; urban growth; and Third World cities.

Instructor(s): G. Tolley, K. Ierulli Terms Offered: Spring

Prerequisite(s): ECON 20100

Equivalent Course(s): ECON 26600, GEOG 26600, LLSO 26202, PBPL 24500

#### GEOG 38200. Introduction to GIS. 100 Units.

This course introduces students to the concepts and applications of geographic information systems (GIS). The course provides a basic foundation of spatial analysis and GIS with laboratory applications in particular techniques and methodology utilizing ESRI's ArcGIS 10. Students will learn to perform spatial analyses and communicate their results through cartography, along with introduction to such concepts as spatial data collection, remote sensing, and database design.

Instructor(s): T. Schuble Terms Offered: Autumn

Equivalent Course(s): GEOG 28200

#### GEOG 38400. Intermediate GIS. 100 Units.

This course covers the development of cartographic and computer-based geographic information system techniques applicable to student research topics.

Instructor(s): R. Greene Terms Offered: Winter Prerequisite(s): GEOG 28200, GEOG 38200

Equivalent Course(s): GEOG 28400

#### GEOG 38800. History of Cartography. 100 Units.

This course offers a grand overview of the key developments in mapmaking throughout history worldwide, from pre-literate cartography to the modern interactive digital environment. It looks at the producers, their audience, the technologies and artistic systems used, and the human and global contexts in which they developed. The course also draws on the extensive map collections of Regenstein Library.

Instructor(s): G. Danzer Terms Offered: Spring

Equivalent Course(s): GEOG 28800

#### GEOG 42400. Urban Landscapes as Social Text. 100 Units.

This seminar explores the meanings found in varieties of urban landscapes, both in the context of individual elements and composite structures. These meanings are examined in relation to three fundamental approaches that can be identified in the analytical literature on landscapes: normative, historical, and communicative modes of conceptualization. Emphasis is placed on analyzing the explicitly visual features of the urban landscape. Students pursue research topics of their own choosing within the general framework.

Instructor(s): M. Conzen Terms Offered: Autumn

Prerequisite(s): Advanced standing and consent of instructor.

Equivalent Course(s): SOCI 30303



### DEPARTMENT OF HISTORY

#### Chair

- Bruce Cumings
  - Professors
- Leora Auslander
- John W. Boyer
- · Mark P. Bradley
- · Dipesh Chakrabarty
- Bruce Cumings
- Constantin Fasolt
- Cornell Fleischer, Near Eastern Languages and Civilizations
- · Michael E. Geyer
- Jan Ellen Goldstein
- Ramón Gutiérrez
- Jonathan Hall
- James Hevia, College
- · Thomas Holt
- Adrian D.S. Johns
- · Walter E. Kaegi
- · James Ketelaar
- Emilio H. Kourí
- David Nirenberg, Committee on Social Thought
- Kenneth Pomeranz
- Moishe Postone, College
- Robert J. Richards
- Christine Stansell
- Mauricio Tenorio
- Bernard Wasserstein
- John E. Woods

**Associate Professors** 

- · Guy S. Alitto
- Dain Borges
- Susan Burns
- · Paul Chenev
- · Edward M. Cook
- Jane Dailey
- Rachel Fulton Brown
- Adam Green

- Julie Saville
- James Sparrow
- Amy Dru Stanley
- Alison Winter
- Tara Zahra

**Assistant Professors** 

- Fredrik Albritton Jonsson
- Matthew Briones
- Cameron Hawkins
- · Faith Hillis
- Rachel Jean-Baptiste
- · Amy Lippert
- · Jonathan Lyon
- Emily Osborn Associate Faculty
- Muzaffar Alam, South Asian Languages and Civilizations
- Michael Allen, Classics
- Clifford Ando, Classics
- · Catherine Brekus, Divinity School
- Alain Bresson, Classics
- John Craig, Social Sciences Division
- Fred Donner, Near Eastern Languages and Civilizations
- Robert W. Fogel, Graduate School of Business
- R.H. Helmholz, Law School
- Dennis Hutchinson, Master New Collegiate Division
- Rochona Majumdar, South Asian Languages and Civilizations
- Paul Mendes Flohr, Divinity School
- John F. Padgett, Political Science
- · Lucy Pick, Divinity School
- A. Holly Shissler, Near East Languages
- Jacqueline Feke, College
- Corey Tazzara, College Emeritus Faculty
- · Ralph A. Austen
- Kathleen Neils Conzen
- Prasenjit Duara
- T. Bentley Duncan
- Sheila Fitzpatrick
- Hanna H. Gray

- Harry Harootunian
- Neil Harris
- · Halil Inalcik
- · Ronald B. Inden
- · Julius Kirshner
- William H. McNeill
- · Tetsuo Najita
- · William Sewell
- Ronald Suny
- · Noel Swedlow

From its 1892 establishment as one of the founding departments of the University of Chicago, the History Department has fostered programs leading to the Ph.D. degree in a broad range of fields. Theoretically sophisticated comparative and interdisciplinary approaches are a hallmark of our program. Along with graduate fields organized by traditional regional, national, and chronological boundaries (African, Ancient Greek and Roman, British, Byzantine, Caribbean Atlantic, Chinese, Early Modern and Modern European, French, Iranian and Central Asian, Islamic and Ottoman, Japanese, Latin American, Medieval, Modern Middle Eastern, Modern Jewish, Russian/Soviet, South Asian, United States), the Department offers a comprehensive range of interdisciplinary, theoretical, and comparative fields of study. Included are such fields as cultural studies in history, intellectual history, legal history, race and ethnicity, gender and sexuality, modern international history, social practices, and the history of science and medicine.

The History Department expects to welcome about twenty to twenty-five new graduate students each year. They are broadly distributed by field and back grounds. Faculty members work in close concert with students in the small graduate seminars, colloquia, and tutorials that form the core of advanced training at Chicago. It is here, in intense interaction with faculty and fellow students, that individual interests and the professional skills of the historian are honed. As in any history program, a student is expected to learn to read critically, to search out and analyze primary materials with skill, and to write with rigor. At Chicago, we also expect that students will demonstrate through their own creativity a significant advancement in the field itself.

Students are strongly encouraged to take courses outside of History and to compose one of their three oral fields in a comparative or theoretical discipline. There are extensive opportunities to develop ancillary fields with faculty in other social science and humanities programs, and in the University's professional schools of Business, Divinity, Law, Medicine, Public Policy, and Social Service Administration. Through consortia arrangements, students can also supplement their Chicago studies with work at Stanford, Berkeley, or any of the Ivy League or Big Ten Midwestern universities, where they can earn credit for courses while registered at the University of Chicago.

Central to our program are interdisciplinary workshops and special conferences that bring together students and faculty from throughout the University for

intellectual exchange. Some recent workshops involving Department members include African Studies, Early Modern, East Asia Gender and Sexuality Studies, History of the Human Sciences, Human Rights, Interdisciplinary Approaches to Modern France, Late Antiquity and Byzantium, Latin American History, Medieval Studies, Middle East History and Theory, Modern European History, Paris Center, Race and Religion, Reproduction of Race and Racial Ideologies, Russian Studies, and Social History. Workshops insure dissertation writing students a supportive intellectual community within which both students and faculty are able to present and comment upon research in progress.

For more detailed information on History Department faculty and the graduate program, please visit the Department's website at http://history.uchicago.edu/.

#### **ADMISSION**

Requirements for admission are:

- 1. The degree of Bachelor of Arts or its equivalent
- 2. A distinguished undergraduate record
- 3. High competence in the foreign language

Four parts of the application are critically important: the student's academic record, letters of recommendation submitted by persons able to describe the student's achievements and promise, a significant example of the student's work, (bachelor's essay, master's thesis, research or course paper) and, finally, the student's statement of purpose which describes the intellectual issues and historical subjects to be explored at the University of Chicago. Although many graduate students change their focus in the course of their studies, it is helpful to have the clearest possible idea of applicants' interests and any research experience to date.

In addition, applicants are required to submit Graduate Record Examination aptitude scores that are not more than five years old (the History subject test is not required). It is advisable, especially for aid applicants, to take the GRE no later than October so that scores will arrive on time. Applicants whose first language is not English must submit scores from the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS).

#### Information on How to Apply

The application process for admission and financial aid for all Social Sciences graduate programs is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online at: https://applyssd.uchicago.edu/apply/

Questions pertaining to admissions and aid should be directed to admissions@ssd.uchicago.edu or (773) 702-8415. Most of the documents needed for the application can be uploaded through the online application. Any additional correspondence and materials sent in support of applications should be mailed to:

The University of Chicago Division of the Social Sciences Admissions Office, Foster 105 1130 East 59th Street Chicago, IL 60637

#### PROGRAM FOR THE FIRST YEAR

Normal registration the first year is eight graded courses. Among the eight courses taken, the curriculum for the first year prescribes:

- 1. a two quarter seminar
- 2. six other courses, including two in an area outside their major field

These courses are taken for letter grades and must be completed by the end of the spring quarter. Students receive the master's degree upon completing the first year curriculum.

Students are also required to take a foreign language reading examination during their first term. A few general comments on these hurdles may be in order. Students are required to secure a high pass on one University of Chicago Office of Test Administration foreign language reading examination in their first year. Each field will specify the language(s) to be used and the degree of proficiency required if beyond the minimum results mentioned above. The fields will also determine whether students have met the requisite standards.

Near the end of the spring quarter a faculty committee will decide whether a student is qualified to proceed toward the Ph.D. degree. Evidence for the judgment will be:

- 1. Evaluation of the seminar paper
- 2. Autumn and winter quarter course grades
- 3. A high pass in a foreign language reading examination

#### AFTER THE FIRST YEAR

Students who are recommended for the Ph.D. continue their formal study and will be expected to complete another year of graded course work including another graded seminar, unless they petition for credit for previous graduate work. The Ph.D. field examination is taken during the third year. Students are examined in three Ph.D. fields in a two hour oral examination. Within two quarters of passing the field examination, the student presents the dissertation proposal at a formal public hearing such as a workshop, and it must be approved by the dissertation committee. The student is then admitted to candidacy for the doctoral degree after the hearing.

#### PRE-DISSERTATION FELLOWSHIPS

The Freehling, Kunstadter, and Sinkler families and friends have made funds available for summer research fellowships, averaging about \$2,000, to support travel to archival collections. Two Eric Cochrane Traveling Fellowships of \$3,000 each are awarded annually to assist graduate students in western European history in making a summer research trip to Europe. The Arthur Mann Fellowship was created to award an Americanist in summer research. Other fellowships may be

available each year. Awards of up to \$300 for travel to present papers at scholarly conferences are available.

### WORK ON THE DISSERTATION

Following approval of the dissertation proposal and subsequent admission to candidacy for the Ph.D. degree, students are expected to devote their time to dissertation research. Each year the Division of Social Sciences and the department awards a number of dissertation write up fellowships. Formal defense of the completed dissertation, written with the guidance of a three or four member dissertation committee, concludes the degree requirements. All requirements for the Ph.D. degree including the final defense must be completed within ten calendar years from the date of matriculation, although many students graduate in six to eight years.

#### TEACHING OPPORTUNITIES

Students serve as assistants and lecturers in introductory History courses, Social Sciences and Humanities core sequences, the College writing program, and various civilizations sequences. The History Department's von Holst Prize Lectureships permit three students to design undergraduate courses centered on their dissertation research. The five students who receive the Bessie L. Pierce Prize Preceptorship Award guide third and fourth year History undergraduates in A.B. essay seminars. Students acquire initial teaching experience through an internship program in which they assist faculty with the design, teaching, and grading of courses. Numerous students also gain valuable college teaching experience in other Chicago area institutions.

#### COURSES

The department website offers descriptions of graduate courses scheduled for the current academic year: http://history.uchicago.edu/page/graduate-courses

#### HISTORY COURSES

#### HIST 30802. Alexander the Great. 100 Units.

The exploits of Alexander the Great have fascinated historians since the end of the third century B.C. This course will provide an introduction not only to the history of Alexander's reign, but also to the main historiographical traditions (both ancient and modern) that shape our view of his legacy. All sources will be read in translation.

Instructor(s): C. Hawkins

Equivalent Course(s): HIST 20802, CLAS 34506, CLCV 24506

# HIST 30803. Aristophanes' Athens. 100 Units.

This course will focus on nine of Aristophanes' plays in translation (*Acharnians; Wasps; Clouds; Peace; Birds; Lysistrata; Thesmophoriazousai; Frogs;* and *Ploutos*) in order to determine the value Old Comedy possesses for reconstructing sociohistorical structures, norms, expectations, and concerns. Among the topics to be addressed are the performative, ritual, and political contexts of Attic comedy, the constituency of audiences, the relationship of comedy to satire, the use of dramatic stereotypes, freedom of speech, and the limits of dissent.

Instructor(s): J. Hall Terms Offered: Winter

Equivalent Course(s): CLCV 23608, CLAS 33608, ANCM 33900, FNDL 23608, HIST 20803

# HIST 31303. Byzantine Historians. 100 Units.

Reading and analysis of Byzantine historians and Byzantine historical thought. Includes Procopius Michael Attaleiates, Michael Psellos, Anna Comnena, Niketas Choniates. Lectures and discussion. Two take home essays.

Instructor(s): W. Kaegi Terms Offered: Spring

Equivalent Course(s): HIST 21303

# HIST 31400. 18th-Century Britain. 100 Units.

This mixed lecture and discussion course explores the main political, social, intellectual, economic, and religious developments in Britain from the Glorious Revolution to Napoleonic wars. Emphasis is on the relationship between politics and the social order, and on the evolution of modes of political behavior.

Instructor(s): T. Cook Terms Offered: Winter

Equivalent Course(s): HIST 21400

#### HIST 31703. Byzantine Empire, 1025 to 1453. 100 Units.

Internal and external problems and developments. Internal tensions on the eve of the arrival of the Seljuks. Eleventh-century economic growth. The Crusades. Achievements and deficiencies of Komnenian Byzantium. The Fourth Crusade and Byzantine successor states. Palaeologan political and cultural revival. Religious topics such as relations with the papacy, Bogomilism, and Hesychasm. Readings will include M. Angold, *The Byzantine Empire 1025–1204*; D. M. Nicol, *Last Centuries of Byzantium*; the histories of Michael Psellos and Anna Comnena. Course grade will include a final examination and a 10-page paper.

Instructor(s): W. Kaegi Terms Offered: Autumn

Equivalent Course(s): HIST 21703, ANCM 36700, NEHC 20507

#### HIST 32002. Byzantine Military History. 100 Units.

Interpretation of major issues of institutional, operational, and strategic history between the fourth and fourteenth centuries. Readings include selections from Byzantine military manuals and historians, as well as recent historical assessments. Among topics are debates on the theme system and numbers. Final examination and short paper.

Instructor(s): W. Kaegi Terms Offered: Autumn

Equivalent Course(s): ANCM 34606, NEHC 20510, NEHC 30510, HIST 22002

# HIST 33000. Intellectual Property and Piracy. 100 Units.

Intellectual property presents some of the most pressing problems in modern science, industry, and law. This course helps students to understand why. It explains the principles of modern intellectual property, by examining their historical development over the last five hundred years. Using sources from the history of literature, art, and music—as well as from modern science and information technology—students will discover how piracy and property have clashed since the Renaissance, and still do so today. They will then be well-placed to address the central problem of intellectual property, and one of the most basic questions facing today's universities: What is the proper relation between creativity and commerce? Instructor(s): A. Johns Terms Offered: Winter

Equivalent Course(s): CHSS 31900, HIPS 26700, LLSO 22104, HIST 23000

# HIST 33001. Northern Renaissance/Early Reformation. 100 Units.

In surveying the history of this period, attention is devoted to the relationships between the movements of Renaissance and Reformation in northern Europe from the late fifteenth to the mid-sixteenth centuries. Primary texts are emphasized.

Instructor(s): H. Gray Terms Offered: Autumn Equivalent Course(s): HIST 23001,LLSO 23112

# HIST 33302. Europe, 1815-1914. 100 Units.

This is the second installment of a three-quarter sequence (HIST 23305, HIST 23302, HIST 23306), which surveys the history of Europe from the era of its greatest hegemony in the world to the eve of World War I. Themes considered include industrialization; the revolutions of 1848; the formation and consolidation of modern nation-states; the rise and travails of political liberalism and laissez faire; the spread of socialism in its various guises; international rivalries, alliances, and imperialism; and the causes, character, and effects of World War I.

Instructor(s): J. Craig Terms Offered: Winter

Note(s): Only offered at the undergraduate level in 2013/2014

Equivalent Course(s): HIST 23302

#### HIST 33305. Europe, 1660-1815. 100 Units.

This is the first installment of a three-quarter sequence (HIST 23305, HIST 23302, HIST 23306), which offers a general introduction to the processes and events that constituted the passage to modernity in Europe: monarchical absolutism as a means to state-building on the Continent and its parliamentary alternative in Britain; the intellectual and cultural transformations effected by the Enlightenment, including the creation of a liberal public sphere; the French Revolution and its pan-European implications; the rise of the laissez-faire market and the Industrial Revolution; the emergence of feminism and socialism. The course will be conducted primarily by means of lectures. Readings will include both primary and secondary sources.

Instructor(s): J. Goldstein Terms Offered: Autumn

Note(s): Only offered at the undergraduate level in 2013/2014

Equivalent Course(s): HIST 23305

# HIST 33306. Europe, 1914-present. 100 Units.

This is the third installment of a three-quarter sequence (HIST 23305, HIST 23302, HIST 23306). This lecture course will provide an advanced, introductory survey into twentieth-century European history. It provides a critical overview of the main political, social, and cultural developments. It pays attention to the shifting "weight" of European regions and, especially, of eastern and southern Europe. Of course, the course will cover the usual aspects of any such history, which include causes, experiences, and effects of World War I and World War II as well as the history of the Cold War in Europe and its intersection with decolonization; the emergent realities of an expanding European integration in a globalizing migration and trade regime and the resulting struggles with European identities; and, not least, the shifting balance from a work-oriented to a leisure- and consumer-oriented society. The latter is of particular interest because this shift is often linked to the growing renunciation of violence in European society, a veritable value-change, and the emergence of Europe as a peaceable kingdom or, as one American pundit has it, the transition of Europe from Mars to Venus. The turn to violence and the formation of extremely violent societies on one hand and the pacification of Europe and its societies on the other is the real thread running through the course. But the proof is, as they say, in the pudding. Has Europe really become more peaceable after 1989 than, say, in 1913? And if 2013 is like 1913, what might 2014 look like?

Instructor(s): M. Geyer Terms Offered: Spring

Equivalent Course(s): HIST 23306

# HIST 33312. Jews in the Diaspora since 1945. 100 Units.

This lecture course surveys the main features of the social and political history of the Jews in the Diaspora from 1945 to the present. Among the topics discussed will be demographic change and migration; the long-term impact of the Shoah; Israel-Diaspora relations; the dissolution of the Jewish communities of the Muslim world; Soviet Jewry; and evolving Christian attitudes towards Jews.

Instructor(s): B. Wasserstein Terms Offered: Autumn

Equivalent Course(s): HIST 23312

#### HIST 33511. Industry and Empire 1600-1830. 100 Units.

What was the place of the empire in Britain's Industrial Revolution? How much did colonial markets and resources contribute to economic growth in the metropole? Readings will include works by Williams, Brenner, de Vries, Parthasarathi,

Zahedieh, Inikori, Barbier, and Belich, among others.

Instructor(s): F. Albritton Johnsson Terms Offered: Autumn

Equivalent Course(s): HIST 23511

## HIST 33602. Pushkin and His Age. 100 Units.

This course approaches the Golden Age of Russian culture through the prism of the artistic and intellectual legacy of its most influential writer. We read and analyze Pushkin's poetry, prose fiction, essays, and critical works in the context of the critical, philosophical, and political debates of his time. We also consider writers such as Rousseau, Montesquieu, Karamzin, Balzac, Chaadaev, and Belinsky. Texts in English or the original; classes conducted in English.

Instructor(s): Daria Khitrova Terms Offered: Autumn Equivalent Course(s): RUSS 34101,HIST 23602,RUSS 24101

## HIST 34001. Love and Eros: Japanese History. 100 Units.

Equivalent Course(s): GNSE 24001, GNSE 34001, HIST 24001, JAPN 24001, JAPN 34001

#### HIST 34206. Medicine and Culture in Modern East Asia. 100 Units.

This course will focus on the cultural history of medicine in China, Japan, and Korea from the mid-nineteenth century to the 1980s. We will be concerned with tracing the circulation of new medical knowledge and understanding its cultural and social implications. Topics to be explored include the introduction of "Western medicine" and its impact for "traditional" medicine, the struggles over public health, gender, medicine, and modernity, consumer culture, and medicine. No knowledge of an East Asian language is required, but those with reading skills will be encouraged to utilize them.

Instructor(s): S. Burns Terms Offered: Winter

Equivalent Course(s): EALC 26201, EALC 36201, HIST 24206

# HIST 34401. History of the Fatimid Caliphate. 100 Units.

Instructor(s): P. Walker Terms Offered: Spring

Equivalent Course(s): NEHC 30645, HIST 24401, NEHC 20645

#### HIST 34500. Reading Qing Documents. 100 Units.

Reading and discussion of nineteenth- and early twentieth-century historical political documents, including such forms as memorials, decrees, local gazetteers, diplomatic communications, essays, and the like.

Instructor(s): G. Alitto Terms Offered: Winter

Equivalent Course(s): HIST 24500, EALC 24500, EALC 34500

#### HIST 34802. Gender and Japanese History. 100 Units.

This course explores issues of gender within Japanese history from ancient to modern times, with a focus on the period from the eighteenth to the twentieth centuries.

Instructor(s): S. Burns Terms Offered: Spring

Equivalent Course(s): EALC 25506,GNSE 24701,GNSE 34700,JAPN 25506,JAPN 35506,HIST 24802

# HIST 34806. History of Japanese Philosophy. 100 Units.

What is philosophy and why does looking at Japanese philosophy make a difference? By examining Buddhist, Confucian, Shinto, and modern academic philosophical traditions, this course will provide a history of ideas found in Japan and central to thinking about being/non-being, government, ethics, aesthetics, economics, faith, and practice.

Instructor(s): J. Ketelaar Terms Offered: Autumn

Equivalent Course(s): EALC 24807, EALC 34807, HIST 24806

# HIST 35110. Philosophy of History: Narrative and Explanation. 100 Units.

This lecture-discussion course will trace different theories of explanation in history from the nineteenth century to the present. We will examine the ideas of Humboldt, Ranke, Dilthey, Collingwood, Braudel, Hempel, Danto, and White. The considerations will encompass such topics as the nature of the past such that one can explain its features, the role of laws in historical explanation, the use of Verstehen history as a science, the character of narrative explanation, the structure of historical versus other kinds of explanation, and the function of the footnote. (B) (II)

Instructor(s): R. Richards Terms Offered: Autumn

Equivalent Course(s): PHIL 20506, PHIL 30506, CHSS 35110, HIST 25110

#### HIST 35208. Motion Pictures in the Human Sciences. 100 Units.

This course will examine the relationship between moving images, particularly motion-picture films, and the human sciences broadly construed, from the early days of cinema to the advent of FMRI. It will use primary source documents alongside screenings to allow students to study what the moving image meant to researchers wishing to develop knowledge of mind and behavior—what they thought film could do that still photography, and unmediated human observation, could not. The kinds of motion pictures we will study will vary widely, from infant development studies to psychiatric films, from documentaries to research films, and from films made by scientists or clinicians as part of their laboratory or therapeutic work to experimental films made by seasoned film-makers. We will explore how people used the recordings they made, in their own studies, in communications with other scientists, and for didactic and other purposes. We will also discuss how researchers' claims about mental processes—perception, memory, consciousness, and interpersonal influence—drew on their understandings of particular technologies.

Instructor(s): A. Winter Terms Offered: Spring

Equivalent Course(s): HIST 25208, CHSS 35208, HIPS 25208

# HIST 35300. American Revolution, 1763 to 1789. 100 Units.

This lecture and discussion course explores the background of the American Revolution and the problem of organizing a new nation. The first half of the course uses the theory of revolutionary stages to organize a framework for the events of the 1760s and 1770s, and the second half of the course examines the period of constitution-making (1776-1789) for evidence on the ways in which the Revolution was truly revolutionary.

Instructor(s): E. Cook Terms Offered: Winter Equivalent Course(s): HIST 25300,LLSO 20601

# HIST 35304. Goethe: Literature, Science, Philosophy. Units.

This lecture-discussion course will examine Johann Wolfgang von Goethe's intellectual development, from the time he wrote Sorrows of a Young Werther through the final stages of Faust. Along the way, we will read a selection of Goethe's plays, poetry, and travel literature. We will also examine his scientific work, especially his theory of color and his morphological theories. On the philosophical side, we will discuss Geothe's coming to terms with Kant (especially the latter's third Critique) and his adoption of Schelling's transcendental idealism. The theme uniting the exploration of the various works of Goethe will be the unity of the artistic and scientific understanding of nature, especially as he exemplified the unity in "the eternal feminine." German is not required, but helpful.

Instructor(s): R. Richards

Equivalent Course(s): HIST 25304,CHSS 31202,PHIL 20610,PHIL 30610,GRMN 25304,GRMN 35304,FNDL 23511,HIPS 26701

#### HIST 35415. History of Information. 100 Units.

'Information' in all its forms is perhaps the defining phenomenon of our age. But although we tend to think of it as something distinctively modern, in fact it came into being through a long history of thought, practice, and technology. This course will therefore suggest how to think historically about information. Using examples that range from the Middle Ages to the twenty-first century, we shall explore how different societies have conceptualized the subject, and how they have sought to control it. We shall address how information has been collected, classified, circulated, contested, and destroyed. The aim is to provide a different kind of understanding of information practices—one that can be put to use in other historical inquiries, as well as casting an unfamiliar light on our own everyday lives. Instructor(s): A. Johns Terms Offered: Autumn

Equivalent Course(s): CHSS 35415,LLSO 23501,HIST 25415

#### HIST 35505. Sciences of Memory in 20th Century. 100 Units.

This course will examine a series of episodes in the history of the understanding of autobiographical memory, beginning with the emergence of academic psychology, and also psychoanalysis, in the late nineteenth century, and ending with the "memory war" of the 1980s and 90s The course will include an examination of the yoked history of beliefs about individual and "collective" memory, of the impact of memory therapies during the first and second World Wars, of the impact of innovations in brain surgery on beliefs about the physiological memory record and the neurophysiology of remembering, and the impact of the rise forensic psychology on the popular, scientific, and legal understanding of memory.

Instructor(s): A. Winter Terms Offered: Winter

Equivalent Course(s): HIPS 28002, CHSS 31502, HIST 25510

# HIST 35704-35804-35904. Islamic History and Society I-II; Islamic History and Society-III: The Modern Middle East.

This sequence meets the general education requirement in civilization studies. This sequence surveys the main trends in the political history of the Islamic world, with some attention to economic, social, and intellectual history. Taking these courses in sequence is recommended but not required.

# HIST 35704. Islamic History and Society I: The Rise of Islam and the Caliphate. 100 Units.

This course covers the period from ca. 600 to 1100, including the rise and spread of Islam, the Islamic empire under the Umayyad and Abbasid caliphs, and the emergence of regional Islamic states from Afghanistan and eastern Iran to North Africa and Spain.

Instructor(s): F. Donner Terms Offered: Autumn

Prerequisite(s): Not open to first-year students

Note(s): Taking these courses in sequence is recommended but not required. This sequence meets the general eduation requirement in civilization studies. Equivalent Course(s): NEHC 20501,HIST 25704,ISLM 30500,RLST 20501

# HIST 35804. Islamic History and Society II: The Middle Period. 100 Units.

This course covers the period from ca. 1100 to 1750, including the arrival of the Steppe Peoples (Turks and Mongols), the Mongol successor states, and the Mamluks of Egypt and Syria. We also study the foundation of the great Islamic regional empires of the Ottomans, Safavids, and Moghuls.

 $Instructor(s)\hbox{:}\ J.\ Woods\ Terms\ Offered\hbox{:}\ Winter$ 

Prerequisite(s): Not open to first-year students

Equivalent Course(s): NEHC 20502, HIST 25804, ISLM 30600

# HIST 35904. Islamic History and Society III: The Modern Middle East. 100 Units.

This course covers the period from ca. 1750 to the present, focusing on Western military, economic, and ideological encroachment; the impact of such ideas as nationalism and liberalism; efforts at reform in the Islamic states; the emergence of the "modern" Middle East after World War I; the struggle for liberation from Western colonial and imperial control; the Middle Eastern states in the cold war era; and local and regional conflicts.

Instructor(s): A. Shissler Terms Offered: Spring Prerequisite(s): Not open to first-year students

Note(s): This course does not apply to the medieval studies major or minor.

Equivalent Course(s): NEHC 20503, HIST 25904, ISLM 30700

# HIST 35804-35904. Islamic History and Society II; Islamic History and Society-III: The Modern Middle East.

# HIST 35804. Islamic History and Society II: The Middle Period. 100 Units.

This course covers the period from ca. 1100 to 1750, including the arrival of the Steppe Peoples (Turks and Mongols), the Mongol successor states, and the Mamluks of Egypt and Syria. We also study the foundation of the great Islamic regional empires of the Ottomans, Safavids, and Moghuls.

Instructor(s): J. Woods Terms Offered: Winter

Prerequisite(s): Not open to first-year students

Equivalent Course(s): NEHC 20502, HIST 25804, ISLM 30600

# HIST 35904. Islamic History and Society III: The Modern Middle East. 100 Units.

This course covers the period from ca. 1750 to the present, focusing on Western military, economic, and ideological encroachment; the impact of such ideas as nationalism and liberalism; efforts at reform in the Islamic states; the emergence of the "modern" Middle East after World War I; the struggle for liberation from Western colonial and imperial control; the Middle Eastern states in the cold war era; and local and regional conflicts.

Instructor(s): A. Shissler Terms Offered: Spring

Prerequisite(s): Not open to first-year students

Note(s): This course does not apply to the medieval studies major or minor.

Equivalent Course(s): NEHC 20503, HIST 25904, ISLM 30700

#### HIST 35902. History of Israeli-Arab Conflict. 100 Units.

This lecture course traces the development of the Arab-Israeli conflict from its nineteenth-century origins to the present day. It examines the social and ideological roots of Zionism and Palestinan Arab nationalism, the growth of Arab-Jewish hostility in Palestine during the late Ottoman and British mandate periods, the involvement of the Arab states and the great powers, the series of Arab-Israeli wars, the two intifadas, and the zigzag progress towards negotiated agreements between Israel and the Arab states and between Israel and the Palestinians.

Instructor(s): B. Wasserstein Terms Offered: Autumn

Equivalent Course(s): HIST 25902,INRE 36000,INST 25902,JWSG 35902,NEHC 20996,NEHC 30996

#### HIST 35904. Islamic History and Society III: The Modern Middle East. 100 Units.

This course covers the period from ca. 1750 to the present, focusing on Western military, economic, and ideological encroachment; the impact of such ideas as nationalism and liberalism; efforts at reform in the Islamic states; the emergence of the "modern" Middle East after World War I; the struggle for liberation from Western colonial and imperial control; the Middle Eastern states in the cold war era; and local and regional conflicts.

Instructor(s): A. Shissler Terms Offered: Spring

Prerequisite(s): Not open to first-year students

Note(s): This course does not apply to the medieval studies major or minor.

Equivalent Course(s): NEHC 20503, HIST 25904, ISLM 30700

# HIST 36005. Colloquium: Sources for the Study of Islamic History. 100 Units.

This course is designed to acquaint the student with the basic problems and concepts as well as the sources and methodology for the study of pre-modern Islamic history. Sources will be read in English translation and the tools acquired will be applied to specific research projects to be submitted as term papers.

Instructor(s): J. Woods Terms Offered: Spring

Equivalent Course(s): NEHC 20605, NEHC 30605, HIST 26005

#### HIST 36101-36102-36103. Introduction to Latin American Civilization I-II-III.

Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies. This sequence is offered every year. This course introduces the history and cultures of Latin America (e.g., Mexico, Central and South America, and the Caribbean Islands).

#### HIST 36101. Introduction to Latin American Civilization I. 100 Units.

Autumn Quarter examines the origins of civilizations in Latin America with a focus on the political, social, and cultural features of the major pre-Columbian civilizations of the Maya, Inca, and Aztec. The quarter concludes with an analysis of the Spanish and Portuguese conquest, and the construction of colonial societies in Latin America.

Terms Offered: Autumn

Equivalent Course(s): LACS 16100, ANTH 23101, CRES 16101, HIST 16101, LACS 34600, SOSC 26100

# HIST 36102. Introduction to Latin American Civilization II. 100 Units.

Winter Quarter addresses the evolution of colonial societies, the wars of independence, and the emergence of Latin American nation-states in the changing international context of the nineteenth century.

Terms Offered: Winter

Equivalent Course(s): ANTH 23102, CRES 16102, HIST 16102, LACS 16200, LACS 34700, SOSC 26200

#### HIST 36103. Introduction to Latin American Civilization III. 100 Units.

Spring Quarter focuses on the twentieth century, with special emphasis on the challenges of economic, political, and social development in the region.

Terms Offered: Spring

Equivalent Course(s): ANTH 23103, CRES 16103, HIST 16103, LACS 16300, LACS 34800, SOSC 26300

#### HIST 36102. Introduction to Latin American Civilization II. 100 Units.

Winter Quarter addresses the evolution of colonial societies, the wars of independence, and the emergence of Latin American nation-states in the changing international context of the nineteenth century.

Terms Offered: Winter

Equivalent Course(s): ANTH 23102, CRES 16102, HIST 16102, LACS 16200, LACS 34700, SOSC 26200

# HIST 36103. Introduction to Latin American Civilization III. 100 Units.

Spring Quarter focuses on the twentieth century, with special emphasis on the challenges of economic, political, and social development in the region.

Terms Offered: Spring

Equivalent Course(s): ANTH 23103, CRES 16103, HIST 16103, LACS 16300, LACS 34800, SOSC 26300

## HIST 36304. Literature and Society in Brazil. 100 Units.

This course surveys the relations between literature and society in Brazil, with an emphasis on the institution of the novel in the nineteenth and early twentieth centuries. The nineteenth-century Brazilian novel, like the Russian novel, was an arena in which intellectuals debated, publicized, and perhaps even discovered social questions. We will examine ways in which fiction has been used and misused as a historical document of slavery and the rise of capitalism, of race relations, of patronage and autonomy, and of marriage, sex, and love. We will read works in translation by Manuel Antonio de Almeida, Jose de Alencar, Machado de Assis, Aluisio de Azevedo, and others.

Instructor(s): D. Borges Terms Offered: Spring

Equivalent Course(s): LACS 26304, LACS 36304, HIST 26304

# HIST 36602. Mughal India: Tradition and Transition. 100 Units.

The focus of this course is on the period of Mughal rule during the late sixteenth, seventeenth, and eighteenth centuries, especially on selected issues that have been at the center of historiographical debate in the past decades.

Instructor(s): M. Alam Terms Offered: Winter

Prerequisite(s): Advanced standing and consent of instructor. Prior knowledge of appropriate history and secondary literature.

Equivalent Course(s): SALC 27701, HIST 26602, SALC 37701

## HIST 37006. Not Just the Facts: Telling about the American South. 100 Units.

The great jurist Oliver Wendell Holmes Jr. once observed that "The main part of intellectual education is not the acquisition of facts but learning how to make facts live." This course concerns itself with the various ways people have striven to understand the American South, past and present. We read fiction, autobiography, and history (including meditations on how to write history). Main themes of the course include the difference between historical scholarship and writing history in fictional form; the role of the author in each, and consideration of the interstitial space of autobiography; the question of authorial authenticity; and the tension between contemporary demands for truthfulness and the rejection of "truth."

Instructor(s): J. Dailey Terms Offered: Winter Equivalent Course(s): LLSO 25411, HIST 27006

#### HIST 37306. U.S. Women and Gender. 100 Units.

Instructor(s): A. Stanley Terms Offered: Winter

Equivalent Course(s): HMRT 27306, HMRT 37306, LLSO 27306, HIST 27306

# HIST 37411. Thought Reform and Social Control in the PRC. 100 Units.

Building up on fascinating recent research on thought reform, social control, reeducation, spycraft, and police work in the early PRC, we will examine how the new state sought to mold and reeducate its people. We will begin by reading some of the recent English language literature and then move on to read self-criticisms, confessions, petitions, denunciation letters, and police reports in Chinese. Third year Chinese or equivalent is required.

Instructor(s): J. Eyferth Terms Offered: Autumn

Prerequisite(s): Third-year Chinese

Equivalent Course(s): EALC 38411, HIST 27411, EALC 28411

## HIST 37506. Changing America in the Twentieth Century. 100 Units.

This course explores the regional organization of U.S. society and its economy during the pivotal twentieth century, emphasizing the shifting dynamics that explain the spatial distribution of people, resources, economic activity, human settlement patterns, and mobility. We put special focus on the regional restructuring of industry and services, transportation, city growth, and cultural consumption.

Two-day weekend field trip to the Mississippi River required.

Instructor(s): M. Conzen Terms Offered: Winter

Note(s): This course offered odd years.

Equivalent Course(s): GEOG 22100, GEOG 32100, HIST 27506

#### HIST 38800. Historical Geography of the United States. 100 Units.

This course examines the spatial dynamics of empire, the frontier, regional development, the social character of settlement patterns, and the evolution of the cultural landscapes of America from pre-European times to 1900. All-day northern Illinois field trip required.

Instructor(s): M. Conzen Terms Offered: Autumn

Note(s): This course offered in even years.

Equivalent Course(s): GEOG 21900, GEOG 31900, HIST 28800

# HIST 38900. Roots of the Modern American City. 100 Units.

This course traces the economic, social, and physical development of the city in North America from pre-European times to the mid-twentieth century. We emphasize evolving regional urban systems, the changing spatial organization of people and land use in urban areas, and the developing distinctiveness of American urban landscapes. All-day Illinois field trip required.

Instructor(s): M. Conzen Terms Offered: Autumn

Note(s): This course offered in odd years.

Equivalent Course(s): GEOG 26100, ENST 26100, GEOG 36100, HIST 28900

# HIST 39301. Human Rights I: Philosophical Foundations of Human Rights. 100 Units.

Human rights are claims of justice that hold merely in virtue of our shared humanity. In this course we will explore philosophical theories of this elementary and crucial form of justice. Among topics to be considered are the role that dignity and humanity play in grounding such rights, their relation to political and economic institutions, and the distinction between duties of justice and claims of charity or humanitarian aid. Finally we will consider the application of such theories to concrete, problematic and pressing problems, such as global poverty, torture and genocide. (V) (I)

Instructor(s): Staff Terms Offered: Spring

Equivalent Course(s): HMRT 20100, HMRT 30100, PHIL 21700, PHIL 31600, HIST

29301,INRE 31600,LAWS 41200,MAPH 40000,LLSO 25100

#### HIST 39302. Human Rights II: History and Theory. 100 Units.

This course is concerned with the theory and the historical evolution of the modern human rights regime. It discusses the emergence of a modern "human rights" culture as a product of the formation and expansion of the system of nation-states and the concurrent rise of value-driven social mobilizations. It proceeds to discuss human rights in two prevailing modalities. First, it explores rights as protection of the body and personhood and the modern, Western notion of individualism. Second, it inquires into rights as they affect groups (e.g., ethnicities and, potentially, transnational corporations) or states.

Instructor(s): M. Bradley Terms Offered: Winter

Equivalent Course(s): HMRT 20200,HMRT 30200,CRES 29302,HIST 29302,INRE

31700,JWSC 26602,LAWS 41301,LLSO 27100

# HIST 39303. Human Rights III: Contemporary Issues in Human Rights. 100 Units.

For U.S. students, the study of international human rights is becoming increasingly important, as interest grows regarding questions of justice around the globe. This interdisciplinary course presents a practitioner's overview of several major contemporary human rights problems as a means to explore the utility of human rights norms and mechanisms, as well as the advocacy roles of civil society organizations, legal and medical professionals, traditional and new media, and social movements. The course may be co-taught by faculty from the Pritzker School of Medicine. Topics may include the prohibition against torture, problems of universalism versus cultural relativism, and the human right to health.

Instructor(s): S. Gzesh Terms Offered: Autumn

Equivalent Course(s): HMRT 20300,HMRT 30300,HIST 29303,INRE 31800,LAWS 78201,LLSO 27200

#### HIST 39311. Refugee History and Digital Archives. 100 Units.

This course is an advanced seminar in the history of refugees and digital archives. We will study the development of humanitarian and human rights protections for refugees, stateless people, and other categories of displaced persons. We will discuss the various ways that state and non-state actors have understood and justified their responses to the forced movements of people. In class discussion, we will place this historical experience in dialogue with the needs of contemporary humanitarian efforts and human rights organizations. As part of this work, we will discuss the use of digital archives for research as well as the development, creation, and information architecture of digital archival collections.

Instructor(s): A. Janco Terms Offered: Autumn

Equivalent Course(s): HMRT 26800, HIST 29311, HMRT 36800

# HIST 39313. Human Rights in Russia and Eurasia. 100 Units.

This course focuses on the political economy of human rights in Russia and Eurasia. We will study how international norms have been "imported" by post-Soviet states. How have regional politics and cultures shaped how rights norms are understood and how they are protected in practice? Why do many post-Soviet countries fail to protect the rights of their citizens? Using knowledge of the history, political culture, and social practices of the region, we will work to identify those rights issues with the most potential for positive change and those more likely to remain enduring problems.

Instructor(s): A. Janco Terms Offered: Winter

Equivalent Course(s): HIST 29312, SLAV 26500, SLAV 36500, HMRT 26500

#### HIST 39511. Civilians and War. 100 Units.

In this course, we will study the history of war and forced migration. We will focus on how particular historical crises have led to the development of human rights protections for people displaced by war. What were these crises and how have they shaped the way we define the rights and status of refugees? How have these conventions been adapted to reflect the challenges of the World Wars, the Cold War, guerrilla warfare, and insurgency? We will study both developments in warfare and strategies for protecting civilians during war.

Instructor(s): A. Janco Terms Offered: Winter

Equivalent Course(s): HMRT 36700, HIST 29511, HMRT 26700

#### HIST 40001. Topics in African American History. Units.

This course is designed to explore in-depth selected topics in African American history and historiography, from the slave trade to the present, with special emphasis on cross-national connections and influences. It is NOT an introductory course, but intended for graduate doctoral students preparing oral exams and students preparing to write MA or BA papers on subjects related to this field. Course requires active participation in class discussions, oral and written presentations on assigned common reading for one or more class sessions, and two essays(c. 400 words) reviewing how selected topics or themes in African American history.

Instructor(s): T. Holt Terms Offered: Autumn Prerequisite(s): Ugrads consent of instructor

# HIST 42901. Vienna and It's Empire: The Habsburg Monarchy and Austrian Rep, 1740-1955. Units.

This colloquium will give students in modern European history a systematic overview of major interpretive problems in Hapsburg and Austrian history from 1740 to 1955. We will consider issues such as the competing historiographical narratives about the fate of the Empire; reform absolutism and eighteenth-century communities in the Empire; 1848 in Vienna and in the Empire; the Empire during the constitutional crises of the 1860's; Liberalism, nationalism, and the political culture of the post-1867 Dualism; mass politics in the Empire after 1890; fin de siecle culture in Vienna; the social history of World War 1 and the collapse of the Empire; the Revolution of 1918 and the reasons behind the ultimate failure of the First Republic; and Authoritarianism, Nazism, and post-war Reconstruction. Instructor(s): J. Boyer Terms Offered: Spring

Prerequisite(s): Fluent reading knowledge of a contemporary European language strongly encouraged

#### HIST 43202. Colloquium: The Anthropocene. Units.

The Antropocene introduces the idea of the human species as a geological agent, capable of altering the physical and biological environment of the planet as a whole through anthropogenic climate change. This course considers the historical origins of the Anthropocene, including the Industrial Revolution, the rise of consumer society, and new modes of energy consumption. Readings will include texts by Barbier, Warde, Smil, Mitchell, Hamilton and Chakrabarty.

Instructor(s): F. Albritton Jonsson Terms Offered: Winter

Prerequisite(s): Advanced Ugrad with consent of instructor

#### HIST 46602. Research Themes II. 100 Units.

Instructor(s): D. Chakrabarty Terms Offered: Spring

Prerequisite(s): SALC Core Requirement

Note(s): This course has a different topic each quarter it is offered. Spring 2014:

"Varieties of South Asian Pasts" Equivalent Course(s): SALC 40200

#### HIST 46702. Issues in Modern South Asian History. Units.

Instructor(s): D. Chakrabarty Terms Offered: Spring

#### HIST 50004. Colloquium: Post-Colonial Africa. Units.

This course explores debates in narrating social, cultural, political and economic change in Africa since 1945. Exploring the recent interest in what historian Frederick Cooper calls "the past of the present," the course will incorporate a variety of disciplinary, methodological and epistemological perspectives. Topics to be explored include: decolonization; the interactions of states and civil society; migration and urbanization; the politics of gender and sexuality; development and globalization; popular culture; health and medicine; and postcolonial theory. Course materials will include historical monographs,, ethnography fiction, memoirs, visual media and films, as well as written and oral primary sources. This course aims to provide students with theoretical and methodological tools to narrate contemporary history. Instructor(s): R. Jean-Baptiste Terms Offered: Spring

Equivalent Course(s): ANTH 52105, CRES 50004, HMRT 50004

# HIST 53502. Colloquium: History of the Human Sciences, 1700-1900. Units.

In eighteenth-and nineteenth-century Europe, several strands of inquiry into the human world, typically emulating the model of the natural sciences, underwent a process of expansion, methodological clarification and -in some case- institutional consolidation. In so doing, they evolved into the now-familiar disciplines of the modern research university, among them anthropology, history, sociology, political economy and psychology. Through the reading of both primary and secondary sources, we will explore the rise of the human sciences, paying attention to the social, political and economic context of their development during the Enlightenment, the decades of political upheaval that began in 1789 and the attempted stabilization after 1815. Following up Jurgen Habermas's insight that psychology and political economy are the master disciplines of an emergent bourgeois society, we shall place particular emphasis upon the development of these sciences in France and Britain. Primary sources may include Mandeville, Montesquieu, Locke, Condillac, Adam Smith, Condorcet, Malthus, Comte, Durkheim.

Reading knowledge of French desirable not required. Advance UG with C/O. Permission of instructors, may be taken as 1st quarter of Grad history research seminar.

Instructor(s): P. Cheney & J. Goldstein Terms Offered: Autumn

#### HIST 55202. Colloquium: World War: A Moral History. Units.

The focus of this course is World Word War II and the Cold War. Its theme is the moral choices states and individuals make in wars, in which violence against civilians- their moral, their removal, their killing -- is an integral part of the war effort and of the war's aim of all combatants. Our first concern will be with the rhetoric and the reality -- the decisions as much as the actual practice -- of violence against civilians among major combatants. We also need to explore the more general reasons, why, when and where violence and, indeed, wars against civilians have such prominence. The second concern is to figure out whether (and, if so, how) we should differentiate between licit and illicit forms of violence against civilians-- or whether they are all equally illicit and repugnant. In other words, what's the difference between Soviet, US, British, and Japanese violence- and what, if any, difference does genocide and the Holocaust make? The third take on the subject consists in elucidating the efforts to protect civilians and, perhaps more provocatively, why we should be so deluded to think that civilians are protected in the first place- given the fact that in World War II more civilians are killed than soldiers and that this is not the exception, but the norm of 20th - and 21st-Century war. There is a great deal of literature, historical and theoretical, on all these concerns. Hence, be prepared for a heavy dose of reading as well as on-going oral and written presentation in lieu of a final paper.

Instructor(s): M. Geyer Terms Offered: Spring Prerequisite(s): Ugrads permission of Instructor

# HIST 55500. Colloquium: Colonialism, Globalization, Postcolonialism. Units.

The course encompasses European overseas expansion from the fifteenth through nineteenth centuries, the emergence from this process of new colonial territories inhabited by non-Europeans, and the fate of these territories as "postcolonies" in the late-twentieth/twenty-first century global order. The analytic goal is to integrate politics (the formation of colonial regimes and successor nation-state); economics (the dialectics of colonialism, underdevelopment and global capitalism) and culture (the construction of European and Third Word/postcolonial identities via colonialism). The lectures and assigned readings will privilege "northern" European (as apposed to Iberian but including French) colonialism and focus upon tropical Africa, the Caribbean and South Asia but students are welcome to challenge or extend this definition of the topic.

Instructor(s): R. Austen Terms Offered: Autumn

Prerequisite(s): Meets with HIST 75101

## HIST 56604. Gender in Late Imperial and Republican China. 100 Units.

How did gender norms change from the Qing era to Republican China? In this graduate course, we will read essays by neo-Confucian thinkers (Zhang Xuecheng) and statecraft authors (Cheng Hongmou, Yan Ruyi), legal texts, excerpts from popular handbooks and encyclopedia (on ritual, reproductive health, and everyday life). In the second half of the course, we will read essays by early twentieth-century writers such as Kang Youwei, Liang Qichao, He-Yin Zhen, Qiu Jin, as well as articles from the popular press. Most of the readings will be in Chinese, though we will use translations alongside the originals, if available.

Instructor(s): J. Eyferth

Equivalent Course(s): GNSE 48220, EALC 48220

#### HIST 58300. Ottoman Diplomatics and Paleography. 100 Units.

NEHC 40583 Readings in a variety of document types from the fifteenth and sixteenth centuries.

Instructor(s): C. Fleischer Terms Offered: Spring

Prerequisite(s): Two years of modern Turkish and one year of Ottoman Turkish, or equivalent.

Equivalent Course(s): NEHC 40583

# HIST 59000. Colloquium: Persian Historical Texts. Units.

This course will focus on the study and utilization of narrative, normative and archival sources in Persian. Texts of the major Iranian historians and biographers will be subjected to close readings and analysis. The scripts, protocols, and formula used by Irano-Isalamic chancelleries will also be introduced and the form and content of published an unpublished archival documents will be transcribed and examined in their institutional context. Knowledge of Persian required.

Instructor(s): J. Woods Terms Offered: Spring Prerequisite(s): Knowledge of Persian required Equivalent Course(s): CMES 30687,NEHC 30687

# HIST 60302. Colloquium: Immigration and Assimilation. Units.

This course explores the history of immigration in what is now the United States, starting with the colonial origins of Spanish, French, Dutch and English settlements, the importation of African slaves, and the massive waves of immigrants that arrived in the nineteenth and twentieth century. Additionally, we will study the adaptation of these immigrants, exploring the validity of the concept of assimilation, comparing and contrasting the experiences of the "Old" and "New" immigrants based on their race, religion, and class standing.

Instructor(s): R. Gutierrez Terms Offered: Autumn Equivalent Course(s): GNSE 60300,LACS 60302

#### HIST 60405. Colloquium: Peter Lombard's Sentences. Units.

For centuries, Peter Lombard's twelfth-century collection of patristic interpretations of Scripture or "sentences" served as the foundation for the formal study of Christian theology. All university masters in theology were required to lecture on the Sentences, and many of the greatest works of late medieval theology began as commentaries on the *Sentences*. Covering in order the mystery of the Trinity (book 1), creation (book 2), the incarnation of the Word (book 3), and the doctrine of signs (book 4), Lombard's *summa* provided at once a structure for inquiry and a limit on the kinds of questions theologians were expected to ask. In this course, we will follow the medieval practice of reading and commenting on the four books of the *Sentences* both in order to learn how medieval Christians thought about God, creation, salvation, virtue, the sacraments, and the last things, and in order to practice making such theological arguments ourselves. The *Sentences* themselves are newly available in English translation, but students will be encouraged insofar as they are able to work with them in the original Latin.

Instructor(s): R. Fulton Terms Offered: Autumn

Equivalent Course(s): HCHR 50405

#### HIST 60902. Colloquium: Jewish Intelletuals in the Post-War World. Units.

This graduate colloquium examines the ideas of some of the major Jewish thinkers of the post-war ear, among them Hannah Arendt, Gershom Scholem, Jacob Talmon, Raymond Aron, the "Commentary crowd', Isaac Deutscher, Arthur Koestler, and George Steiner. We shall read their works and discuss their debates on such issues as the nature of Jewish identity, Zionism, secularism, and the legacy of the Shoah. Instructor(s): B. Wasserstein Terms Offered: Autumn

#### HIST 62404. Colloquium: Race, Sex, and the Law. Units.

This graduate reading colloquium explores the centrality of questions about sex and marriage to the ongoing effort to define the rights of Americans. Our principal focus will be on the African American freedom struggle, but we will also consider how putting issues of interracial sex and marriage at the heart of the civil rights movement changes its narrative as well as intersects with other modern civil rights struggles, especially over same-sex marriage.

Instructor(s): J. Dailey Terms Offered: Spring

## HIST 62903. Colloquium: Urban U.S. History. Units.

This course introduces graduate students to important and innovative scholarly texts in the study of American urban history, with a focus on the nineteenth century. Readings touch upon a range of methodologies, themes, and historical experience, with some focus on white-Indian relations, slavery, gender roles, the West, reformism, and the cultural histories of market relations, public perception and spectacle, and print communication. The colloquium is intended for doctoral students in any department who intended to pursue primary, secondary, or outside field of study in U. S. history, American social and cultural history, comparative cultural history, or American literature. Requirements include careful reading, active and thoughtful participation, and two historiographical presentations in class. Instructor(s): A. Lippert Terms Offered: Spring

# HIST 63402. Colloquium: The Civil Rights Movement. Units.

This course is designed to explore selected topics in the history and historiography of the Civil Rights Movement of the 1950s and 1960s, with a special focus on the lived experience of Movement activists. Our principal objectives will be identifying the roots and causes of the Movement, putting it in context of as well as distinguishing it from earlier political mobilizations, and tracing the countervailing social, political, and international forces that shaped its evolution from the mid-1950s to the late 1960s. Principal course requirement will be essay examining one of the key topics or themes of the course in depth. Instructor(s): T. Holt Terms Offered: Spring

# HIST 64200. Colloquium: The Present as History 1. Units.

This two-quarter course attempts to investigate the global historical transformations of the last third of the twentieth century. It will examine the ongoing social, economic, political, and cultural transformations of contemporary advanced industrial societies and of the global order, and of various theoretical attempts to grasp those transformations. The course will investigate attempts to conceptualize those transformations in terms of the notion of postindustrial society, the idea of a transformation of capitalism, the notion of "postmodernism," as well as with reference to theories of democracy and of nationalism. It will be as much concerned with examining the presuppositions and categories of such theoretical approaches as with the processes of change themselves, and will attempt to illuminate the complex relationship of social, political, and cultural theories to large-scale qualitative historical transformations.

Instructor(s): M. Postone Terms Offered: Winter

# HIST 64300. Colloquium: The Present as History 2. Units.

This two-quarter course attempts to investigate the global historical transformations of the last third of the twentieth century. It will examine the ongoing social, economic, political, and cultural transformations of contemporary advanced industrial societies and of the global order, and of various theoretical attempts to grasp those transformations. The course will investigate attempts to conceptualize those transformations in terms of the notion of postindustrial society, the idea of a transformation of capitalism, the notion of "postmodernism," as well as with reference to theories of democracy and of nationalism. It will be as much concerned with examining the presuppositions and categories of such theoretical approaches as with the processes of change themselves, and will attempt to illuminate the complex relationship of social, political, and cultural theories to large-scale qualitative historical transformations.

Instructor(s): M. Postone Terms Offered: Spring

# HIST 69900. Colloquium: Historiography. Units.

An open-ended discussion course considering the wide range of available approaches to intellectual and cultural history. Readings change from year to year by typically include Lovejoy, Quenting Skinner, Pocock, Weber, Lukacs, E.P. Thompson, Foucault, de Ceteau, Ricoeur, Gertz, Derria.

Instructor(s): J. Goldstein & J. Ketelaar Terms Offered: Spring

# HIST 72701. Sem: Slavery & Freedom, Ancient & Modern 1. Units.

Although slavery was fare from uncommon in historical societies, only in a few did it become deeply entrenched enough in both their economic and social systems that we can describe them as slave societies and/or slave economies. In this course, we will focus on some of the most notable examples - the slave societies of the ancient Graeco-Roman Mediterranean world, and the slave societies of the early modern Atlantic world - in order to explore several interrelated problems. We will begin by analyzing the origins and development of systems of chattel slavery in these different historical contexts, along with the impact those slave systems had on the socio-economic structures and cultural systems of their host societies. We will also consider the many ways in which slaves ought to claim some agency for themselves within those systems, whether by developing strategies of accommodation, or by engaging in acts of resistance. Finally, we will devote considerable time to questions arising from practices of manumission and the coming of emancipation. Why were masters willing to manumit their slaves? How effectively could former slaves integrate themselves into their host societies and claim some kind of autonomy once freed? What kinds of anxieties did manumission produce among the free citizenry, to what kinds of social or legal responses did it give rise, and what were the ideologies, laws, and social practices by which work and citizenship were reconfigured in the wake of slaves' emancipation?

Instructor(s): C. Hawkins & J. Saville Terms Offered: Autumn

Equivalent Course(s): ANCM 41512

# HIST 72702. Sem: Slavery & Freedom, Ancient & Modern 2. Units.

The second quarter focuses on the writing of a seminar paper.

Instructor(s): C. Hawkins Terms Offered: Winter

Prerequisite(s): HIST 72701, part 1 Equivalent Course(s): ANCM 41513

# HIST 75101. Sem: Colonialism, Globalization, Postcolonalism 1. Units.

The course encompasses European overseas expansion from the fifteenth through nineteenth centuries, the emergence from this process of new colonial territories inhabited by non-Europeans, and the fate of these territories as "postcolonies" in the late-twentieth/twenty-first century global order. The analytic goal is to integrate politics (the formation of colonial regimes and successor nation-states); economics (the dialectics of colonialism, underdevelopment and global capitalism) an culture (the construction of European and Third World/postcolonial identities via colonialism). The lectures and assigned readings will privilege "northern" European (as apposed to Iberian but including French) colonialism and focus upon tropical Africa, the Caribbean and South Asia but students are welcome to challenge or extend this definition of the topic.

Instructor(s): R. Austen Terms Offered: Autumn

Prerequisite(s): Meets with HIST 55500

#### HIST 75102. Sem: Colonialism, Globalization, Postcolonialism 2. Units.

The second quarter focuses on the writing of a seminar paper.

Instructor(s): R. Austen Terms Offered: Winter

Prerequisite(s): HIST 75101, part 1

#### HIST 75601. Sem: Mod Korean Hist 1. Units.

By modern, we mean Korea since its "opening" in 1876. We read about one book per week in the autumn. Before each session one student will write a 3-4 page paper on the reading, with another student commenting on it. In the winter, students present the subject, method, and rationale for a significant research paper. Papers should be about forty pages and based in primary materials; ideally this means Korean materials, but ability to read scholarly materials in Korean, Japanese, or Chinese is not a requirement for taking the seminar. Students may also choose a comparative and theoretical approach, examining some problems in modern Korean history in the light of similar problems elsewhere, or through the vision of a body of theory. Instructor(s): B. Cumings Terms Offered: Autumn

Equivalent Course(s): EALC 42400

#### HIST 75602. Sem: Mod Korean Hist 2. Units.

The second quarter focuses on the writing of a seminar paper. See HIST 75601, part 1 course description.

Instructor(s): B. Cumings Terms Offered: Winter

Prerequisite(s): HIST 75601, part 1 Equivalent Course(s): EALC 42101

#### HIST 76001. Sem: Mod Chinese Hist 1. Units.

During the first quarter, students begin defining and researching their seminar paper topic and become acquainted with the secondary literature and primary sources of the area of their research. During the winter quarter, students write a paper on defined topic, based on the secondary literature and primary sources studied during the autumn. The seminar meets every week to discuss the progress of each student's paper.

Instructor(s): G. Alitto Terms Offered: Autumn Prerequisite(s): Reading knowledge of Chinese

Equivalent Course(s): EALC 40500

#### HIST 76002. Sem: Mod Chinese Hist 2. Units.

The second quarter focuses on the writing of a seminar paper. See HIST 76001, part 1 course description.

Instructor(s): G. Alitto Terms Offered: Winter

Prerequisite(s): HIST 76001, part 1 Equivalent Course(s): EALC 40501

# HIST 76303. Sem: Qing Social and Political History 1. Units.

First quarter of a 2-quarter graduate research seminar, focused on a) acquaintance with basic research tools and sources and b) background readings in the social and political history of the Qing (1644-1912) dynasty. Readings in modern Chinese, classical Chinese, and English. Thematic emphases include state/society relations; property rights, landlord/tenant relations, and the structure of rural communities; migration and frontiers; and elite and state attempts to manage popular religion. Accommodations can be made for students interested in other topics, or in slightly earlier or later periods.

Instructor(s): K. Pomeranz Terms Offered: Autumn

#### HIST 76304. Sem: Qing Social and Political History 2. Units.

Second quarter of a 2-quarter graduate research sequence. Some general readings will continue, but the primary emphasis will be on students' work in progress.

Instructor(s): K. Pomeranz Terms Offered: Winter

Prerequisite(s): HIST 76303, part 1

#### HIST 76601. Sem: Japanese Hist 1. Units.

Reading and research in Japanese history, which culminates in a major seminar paper at the end of winter term.

Instructor(s): J. Ketelaar Terms Offered: Autumn

# HIST 76602. Sem: Japanese Hist 2. Units.

In the second quarter, we focus on research topics for student writing the seminar paper.

Instructor(s): J. Ketelaar Terms Offered: Winter

Prerequisite(s): HIST 76601, part 1

#### HIST 78201. Seminar: Ottoman World/Suleyman I. 100 Units.

Instructor(s): C. Fleischer Terms Offered: Autumn

Prerequisite(s): Upper level undergrads with consent only; reading knowledge of at

least 1 European Language recommended

Equivalent Course(s): NEHC 30852

#### HIST 78202. Seminar: Ottoman World/Suleyman II. 100 Units.

Instructor(s): C. Fleischer Terms Offered: Winter

Prerequisite(s): NEHC 30852

Equivalent Course(s): NEHC 30853

# HIST 81601. Sem: Imperial Encounters 1. Units.

This two-quarter seminar explores the range of encounters, collisions, and exchanges that modern European empires have fostered. Geographically, our readings traverse the space from Russia to the Atlantic World, covering overseas colonial empires as well as their overland counterparts; chronologically, they focus on the nineteenth and twentieth centuries. We will consider governance, mobility, imperial politics, the built environment, and consumption as venues of crosscultural contact and exchange; examine the role that imperial societies have played in the construction of ethnic and racial difference, religious practices, and gender norms; as well as consider how the collapse of empires restructured networks, identities, and subjectivities. This course also aims to familiarize students with the range of sources that can be used to write the history of imperial encounters and to equip them with practical and professional skills vital to the historical profession. Instructor(s): L. Auslander & F. Hillis Terms Offered: Autumn

## HIST 81602. Sem: Imperial Encounters 2. Units.

Writing a seminar paper.

Instructor(s): L. Auslander & F. Hillis Terms Offered: Winter

Prerequisite(s): HIST 81601, part 1

# HIST 84501. Research Seminar in US History 1. Units.

This two-quarter seminar supports the planning, research, and writing of graduate seminar papers in US history. The first quarter explore themes, methods, and disputes in the writing of American history - an inquiry leading to the definition of a research theme for the seminar paper. Requirements include an analytical essay on a work of history and an interpretative essay on a primary source. The second quarter of the seminar will focus on the writing of a brief prospectus and the researching, writing, and revising of the seminar paper.

Instructor(s): M. Briones Terms Offered: Autumn

# HIST 84502. Research Seminar in US History 2. Units.

The second quarter focuses on the writing, collaborative critique, and revisions of the seminar paper.

Instructor(s): M. Briones Terms Offered: Winter

Prerequisite(s): HIST 84502, part 1

#### HIST 90000. Reading and Research: History Grad. Units.

Terms Offered: Autumn, Winter, Spring and Summer

**HIST 90600. Orals Fields Preparation: History. Units.** Terms Offered: Autumn, Winter, Spring and Summer

HIST 99700. Thesis Preparation: History. Units. Terms Offered: Autumn, Winter, Spring and Summer



# COMMITTEE ON International Relations

#### Chair

- Mark Phillip Bradley
  - **Professors**
- Ralph A. Austen (Emeritus), History
- John W. Boyer, History
- Dipesh Chakrabarty, South Asian Languages and Civilizations, History
- Terry Clark, Sociology
- Bruce Cumings, History
- Jean Bethke Elshtain, Divinity School
- Michael E. Geyer, History
- · Andreas Glaeser, Sociology
- · Susan Gzesh, Law
- Gary B. Herrigel, Political Science
- · James Hevia, History
- Charles Lipson, Political Science
- · Joseph P. Masco, Anthropology
- John J. Mearsheimer, Political Science
- Robert Pape, Political Science
- Jennifer Pitts, Political Science
- · Eric Posner, Law
- Alberto Simpser, Political Science
- · Dan Slater, Political Science
- Paul Staniland, Political Science
- · Nathan Tarcov, Political Science, Social Thought
- · Bernard Wasserstein, History
- · Lisa Wedeen, Political Science
- · Dali Yang, Political Science
- Dingxin Zhao, Sociology
- Marvin Zonis, Business
  - Instructor
- Anne Holthoefer, International Relations Senior Lecturer
- · Michael Reese, International Relations

# GENERAL INFORMATION

The Committee on International Relations (CIR) offers a one year program of graduate studies leading to the A.M. (Master of Arts) degree; admitted students may apply for a one-year extension during their first year of study to allow for further specialization. CIR makes the resources of a great university available to students seeking a firm grounding in the theory and practice of international relations. An A.M. from CIR will prepare students for a wide range of careers for which the masters is increasingly the entry level degree, as well as for further academic or professional training in political science, law, and business administration. Students interested in combining a CIR A.M. with an M.B.A. can apply to a joint degree program with the University of Chicago Booth School of Business. A dual A.M/M.A. degree with the Harris School of Public Policy or an A.M. /J.D. with the University of Chicago Law School is also available.

CIR provides students with a vibrant intellectual community and core course training in international relations theory. CIR's interdisciplinary faculty and curriculum encourage students to explore a wide range of topics spanning the economic, political, security and social factors shaping international life. Students will learn to craft critical and creative responses to the challenges of the present, including globalization, terrorism, and human rights. Throughout the academic year, each student works closely with an assigned preceptor on all aspects of the program, from selecting courses to designing and writing the master's paper.

CIR offers dedicated counseling and application support to students pursuing further academic study in doctoral or professional school programs. CIR graduates have received and presently pursue doctorates in Political Science as well as degrees in the various professional schools, including law and business administration, at both the University of Chicago and other major research institutions in the U.S. and abroad. An international network of CIR alumni, in concert with the University's office of Career Counseling and Placement Services, assists current students in identifying career possibilities and applying for positions.

# **PRECEPTORS**

Students work closely with one of the preceptors in the CIR. Preceptors guide students in defining their areas of academic specialization as well as in choosing courses. Preceptors also assist students in selecting faculty sponsors for their A.M. papers and take an active role in guiding and evaluating the research and writing of these papers.

# PROGRAMS AND REQUIREMENTS

Students pursuing the Committee on International Relations' Master of Arts degree are expected to complete nine graduate level courses with a minimum GPA of 3.0 and a thirty-five to fifty page master's thesis that must be approved by both a faculty sponsor and a CIR preceptor. In addition, students must successfully complete the introductory seminar Perspectives in International Relations (offered in the Autumn Quarter) and participate in the master's thesis workshop throughout the academic year. Master's workshops are led by CIR preceptors and give students

the opportunity to present and discuss their research projects as they develop from proposal to final draft.

Students may apply for a second year of study A.M. with specialization. This second year requires an additional three quarters of residence during which the student takes an additional nine courses. Students apply for the second year with specialization during their first year in residence.

The joint degree program with the Chicago Booth School of Business is administered through the Division of the Social Sciences. Students pursuing a joint degree must fulfill all the requirements of the CIR degree in addition to the requirements of the respective professional degree, though there are some exceptions. Students enrolled in the dual J.D. /A.M. program with the Law School take nine courses in their fourth year of study, three of which are typically law-school courses and the remaining six from the CIR list of approved courses. Students enrolled in the joint M.B.A/A.M. take a reduced course load of 14 courses in the Booth School of Business and the full nine courses in CIR. Students interested in the dual A.M./M.A. degree program should contact the Harris School of Public Policy for more information.

## **ADMISSION**

Applicants to the Committee on International Relations are expected to meet the graduate admissions requirements of the division. Submission of Graduate Record Examination (GRE) scores is required, except for the joint CIR and Booth School of Business degree program, where the Graduate Management Admission Test (GMAT) is accepted. Applicants from non-English speaking countries must provide evidence of English proficiency by submitting scores from either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS).

CIR is designed to be completed in one academic year (three or four quarters on a full time basis). All financial aid is merit based, and the CIR program offers partial tuition scholarships on a highly competitive basis.

# HOW TO APPLY

The application process for admission and financial aid for all Social Sciences graduate programs is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online at: https://applyssd.uchicago.edu/apply/. Most required supplemental material can be uploaded into the application.

Questions pertaining to admissions and aid should be directed to admissions@ssd.uchicago.edu or (773) 702-8415. All correspondence and material that cannot be uploaded into the application should be mailed to:

The University of Chicago Division of the Social Sciences Admissions Office, Foster 105 1130 East 59th Street

## Chicago, IL 60637

Applicants interested in the dual J.D./A.M. program must apply separately to both the Law School (1111 East 60th Street, Chicago, IL 60637) and the Committee on International Relations. Applicants interested in the joint M.B.A./A.M. program must submit their application to The University of Chicago Booth School of Business, which then refers the application to CIR. Please contact the Harris School of Public Policy regarding the application procedure for the dual A.M./M.A. degree.

# **FURTHER INFORMATION**

Additional program information may be found at the Committee's website, http://cir.uchicago.edu/. You can contact the CIR preceptors at (773) 702-8073, and E.G. Enbar, Student Affairs Administrator, at (773) 702-8312 or egenbar@uchicago.edu.

#### INTERNATIONAL RELATIONS COURSES

## INRE 30800. Political Economy for Public Policy. 100 Units.

This course is designed to serve three interrelated goals. It is an introduction to core concepts in the study of political economy. These concepts include collective action, coordination, and commitment problems; externalities and other forms of market failure; principal-agent relationships; problems of preference aggregation; and agenda setting and voting. The course also introduces basic concepts in game theory, including Nash equilibrium, subgame Perfection, and repeated games. It is not, however, a suitable substitute for a game theory course for doctoral students in the social sciences. Finally, the course provides an overview of some of the key insights from the field of political economy on how institutions shape and constrain the making of public policy, with special attention to various ways in which governments can and cannot be held accountable to their citizens.

Instructor(s): E. Bueno de Mesquita Terms Offered: Fall Equivalent Course(s): PPHA 30800,PLSC 30200

# INRE 31600. Human Rights I: Philosophical Foundations of Human Rights. 100 Units.

Human rights are claims of justice that hold merely in virtue of our shared humanity. In this course we will explore philosophical theories of this elementary and crucial form of justice. Among topics to be considered are the role that dignity and humanity play in grounding such rights, their relation to political and economic institutions, and the distinction between duties of justice and claims of charity or humanitarian aid. Finally we will consider the application of such theories to concrete, problematic and pressing problems, such as global poverty, torture and genocide. (V) (I)

Instructor(s): Staff Terms Offered: Spring

Equivalent Course(s): HMRT 20100,HMRT 30100,PHIL 21700,PHIL 31600,HIST 29301,HIST 39301,LAWS 41200,MAPH 40000,LLSO 25100

# INRE 31700. Human Rights II: History and Theory. 100 Units.

This course is concerned with the theory and the historical evolution of the modern human rights regime. It discusses the emergence of a modern "human rights" culture as a product of the formation and expansion of the system of nation-states and the concurrent rise of value-driven social mobilizations. It proceeds to discuss human rights in two prevailing modalities. First, it explores rights as protection of the body and personhood and the modern, Western notion of individualism. Second, it inquires into rights as they affect groups (e.g., ethnicities and, potentially, transnational corporations) or states.

Instructor(s): M. Bradley Terms Offered: Winter

Equivalent Course(s): HMRT 20200,HMRT 30200,CRES 29302,HIST 29302,HIST

39302,JWSC 26602,LAWS 41301,LLSO 27100

# INRE 31800. Human Rights III: Contemporary Issues in Human Rights. 100 Units.

For U.S. students, the study of international human rights is becoming increasingly important, as interest grows regarding questions of justice around the globe. This interdisciplinary course presents a practitioner's overview of several major contemporary human rights problems as a means to explore the utility of human rights norms and mechanisms, as well as the advocacy roles of civil society organizations, legal and medical professionals, traditional and new media, and social movements. The course may be co-taught by faculty from the Pritzker School of Medicine. Topics may include the prohibition against torture, problems of universalism versus cultural relativism, and the human right to health.

Instructor(s): S. Gzesh Terms Offered: Autumn

Equivalent Course(s): HMRT 20300,HMRT 30300,HIST 29303,HIST 39303,LAWS 78201,LLSO 27200

#### INRE 36000. History of Israeli-Arab Conflict. 100 Units.

This lecture course traces the development of the Arab-Israeli conflict from its nineteenth-century origins to the present day. It examines the social and ideological roots of Zionism and Palestinan Arab nationalism, the growth of Arab-Jewish hostility in Palestine during the late Ottoman and British mandate periods, the involvement of the Arab states and the great powers, the series of Arab-Israeli wars, the two intifadas, and the zigzag progress towards negotiated agreements between Israel and the Arab states and between Israel and the Palestinians.

Instructor(s): B. Wasserstein Terms Offered: Autumn

Equivalent Course(s): HIST 25902,HIST 35902,INST 25902,JWSG 35902,NEHC 20996,NEHC 30996

#### INRE 44801. Advanced Topics in International Political Economy. 100 Units.

This course studies many topics in international political economy in detail. Â The topics include for example the politics of international trade, intro to the new institutional economics, variety of capitalism and welfare state, and China's political economy. Â The goal of this course is to acquaint students with more advanced political economy topics and the tools of research, as well as to help students work on their research papers.

Equivalent Course(s): PPHA 34801

# INRE 44901. Advanced Topics in International Security. 100 Units.

This course will concentrate on an in-depth review of recent scholarship in the area of International Security. Specifically, we will consider recent works on the issues surrounding Unipolarity, Terrorism, Asymmetric Conflict, Civil War, Ethnic Conflict, and modern Alliance Politics among others. The goal behind this seminar will be to provide students with the tools to understand, and potentially contribute to, contemporary scholarly discussions on the nature of international conflict and cooperation.

Equivalent Course(s): PPHA 39810



# DEPARTMENT OF POLITICAL SCIENCE

#### Chair

- Cathy Cohen Professors
- John J. Brehm
- · Cathy Cohen
- · Michael Dawson
- Robert Gooding-Williams
- J. Mark Hansen
- · Bernard Harcourt, Law
- · Gary Herrigel
- William Howell, Public Policy
- Charles Lipson
- John McCormick
- John J. Mearsheimer
- J. Eric Oliver
- · John F. Padgett
- Robert Pape
- Bernard S. Silberman
- Nathan Tarcov, Social Thought
- Lisa Wedeen
- · Dali Yang
- Linda Zerilli

**Associate Professors** 

- Patchen Markell
- Sankar Muthu
- Jennifer Pitts
- · Gerald N. Rosenberg
- Dan Slater

**Assistant Professors** 

- Michael Albertus
- Julie Cooper
- Iza Hussin
- · Benjamin Lessing
- Stanislav Markus
- · Tianna Paschel

- Alberto Simpser
- Paul Staniland
   Emeritus Faculty
- · Leonard Binder
- David Easton
- Morton A. Kaplan
- · Norman H. Nie
- · Lloyd Rudolph
- Susanne Rudolph
- · William Sewell
- Duncan Snidal
- Ronald Suny Associate Members
- Elisabeth Clemens
- Jean Bethke Elshtain
- Thomas Ginsburg
- · Roger Myerson
- Martha Nussbaum
- · Moishe Postone

The Department of Political Science offers a course of study leading to the Ph.D. degree. A departmental faculty committee makes admission decisions based on an assessment of all the material required in the University application: biographical data, statement of interests and goals in graduate school, transcripts of grades, letters of recommendation, Graduate Record Examination aptitude scores, and a brief writing sample. Committee members want to know what applicants find intellectually exciting and why applicants want to study at the University of Chicago.

The department is committed to training doctoral students in political science broadly conceived. We believe that the best work in political science often crosses subfields and disciplines. Our aim is to help students develop and pursue their intellectual interests while grounding them in the various approaches and methodologies that characterize the discipline. The program requirements mix research papers, coursework, and exams so that students can achieve these goals as they proceed expeditiously towards the Ph.D. degree.

# THE GRADUATE PROGRAM

For purposes of course distribution and comprehensive exams, the department offers courses and exams in five fields. At present, they are theory, American politics, comparative politics, international relations, and methodology. To meet the course distribution requirement, students must complete three courses in each of three fields. Overall, twelve courses taken for quality grades are required by the end of the sixth quarter.

In the first year students are required to take PLSC 30500 Introduction to Data Analysis and write a research paper as part of the normal writing requirement of a class. The most important project in the first two years is the master's paper, a piece of original research that is modeled on a journal article and addresses an important research question or debate.

Students are required to pass comprehensive exams in two fields. The exams are offered twice a year (with the exception of the comparative politics exam, which is scheduled on an individual basis) and they may be taken at any point but the final deadline by which the exams must be taken is the beginning of the seventh quarter (normally autumn quarter of the third year).

Practical pedagogical experience is a program requirement. To satisfy the requirement, students can serve as teaching assistants in undergraduate lecture courses and in the department's methodology sequence. A few advanced graduate students, selected as Grodzins Prize Lecturers, offer their own undergraduate courses. There are also opportunities to serve as teaching interns and instructors in the College's undergraduate core curriculum and as preceptors who assist the undergraduate majors with the writing of B.A. papers.

After completing courses and exams, students turn to the Ph.D. dissertation. The first step is a dissertation proposal that briefly outlines the research question, significance, argument, and method of the dissertation. PLSC 50000 The Dissertation Proposal Seminar, required in the autumn quarter of the third year, is a weekly seminar devoted solely to the presentation and collective discussion of several drafts of each student's dissertation proposal. The proposal must be approved by a committee of three faculty who agree to supervise the dissertation research and present the proposal for departmental approval.

Although advanced graduate research and writing is often a solitary enterprise, students in the department also typically continue to participate in one or more workshops, which are mainly devoted to students' presentation of research in progress for discussion and constructive criticism. Political science students participate in workshops devoted to American Politics, Comparative Politics, East Asia, Political Economy, Political Psychology, Political Theory, International Relations, and International Security Policy to name just a few. There are many other interdisciplinary workshops throughout the University ranging from Law and Economics, to Gender and Sexuality, to Russian Studies, all of which are open to political science students.

Upon receiving final approval of the dissertation by the members of the dissertation committee, the candidate gives a formal presentation based on the dissertation. Following the presentation, which is open to the public, the candidate is questioned by an examining committee of three faculty members.

For more information about current faculty, students, requirements, and courses, consult the department webpage at http://political-science.uchicago.edu/.

# Information on How to Apply

The application process for admission and financial aid for all Social Sciences graduate programs is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines, and department specific information is available online at: https://applyssd.uchicago.edu/apply/. Most admissions materials can be uploaded into the admission application.

Questions pertaining to admissions and aid should be directed to admissions@ssd.uchicago.edu or (773) 702-8415. All correspondence and materials that cannot be uploaded should be mailed to:

The University of Chicago Division of the Social Sciences Admissions Office, Foster 105 1130 East 59th Street Chicago, IL 60637

#### COURSES

For teaching purposes the subject matter of political science has been divided into the following fields of advanced study: political theory, American politics, comparative politics, international relations, and methodology. These fields are thought of not as separate compartments but as broad and flexible areas of specialization. Ph.D. candidates with interest in the governments of particular geographical areas may specialize in those areas by combining work in political science with relevant courses from other departments.

#### FIELD I. POLITICAL THEORY

The field of political theory deals with the basic problems of politics with respect to both substance and method. It is therefore regarded as the foundation for work in all other areas of political science. It is concerned with three orders of problems: with alternative theories relating to the way people act in political affairs; with alternative standards in terms of which policy may be judged; and with alternative kinds of models and methods for pursuing political research.

# FIELD II. AMERICAN POLITICS

The field of American politics deals with the organization, distribution, and orientation of political power in American society. The major items of emphasis are the development of American political thought, the political behavior of individuals, groups, and governmental institutions, elections, and the formation and execution of public policy. Attention is paid both to the present state of the American political system and to its historical roots.

#### FIELD III. COMPARATIVE POLITICS

The field of comparative politics examines phenomena such as state formation, democracy, nationalism, economic organization, revolution, and social movements across time and space. One approach to these phenomena is to develop expertise in a particular era or area, and then to interpret the distinctive political processes and outcomes coming from that context. Another approach is to examine a set of cases in the search for valid generalizations about political phenomena that span across regions or historical eras. A third approach is to rely on formal theory to specify

universal mechanisms or processes, and then to use data from a variety of sources to give credence to the models. All approaches share an assumption that the systematic study of political experience beyond that of the United States is a key ingredient for a discipline that seeks high levels of generality and abstraction.

#### FIELD IV. INTERNATIONAL RELATIONS

The field of international relations is concerned with theoretical and empirical examination of international politics, especially international security and international political economy. Methodological approaches represented by the faculty include historical, case study, quantitative, and mathematical analysis. Workshops provide a common forum within the department for interchange between different questions about and approaches to international politics. In addition, there are important connections to other areas of political science including comparative and American politics, methodology, and political theory. International relations further engages other social science disciplines including international economics, political geography, public policy, and diplomatic history. Students are encouraged to take courses in these and other disciplines, although the department assumes responsibility only for those approaches to the study of international relations which develop the assumptions and utilize the methods employed in the fields of political science. For this field of political science, students are expected to acquire fundamental knowledge of international politics, with special emphasis on international relations theory and research approaches.

#### FIELD V. METHODOLOGY

The field of methodology is concerned with the quantitative and model building skills required for the study of political phenomena. It consists of introductory sequences of courses in both statistical and mathematical analysis, in addition to a variety of more advanced offerings focusing on specific topics. Applications of these methods in particular research areas will be encountered in a number of courses listed under the appropriate substantive fields. The department offers a comprehensive exam in Methodology by petition only; however, students can meet the requirements for course distribution automatically.

The department website offers descriptions of graduate courses scheduled for the current academic year: http://political-science.uchicago.edu/academics/courses.shtml

#### POLITICAL SCIENCE COURSES

#### PLSC 30200. Political Economy for Public Policy. 100 Units.

This course is designed to serve three interrelated goals. It is an introduction to core concepts in the study of political economy. These concepts include collective action, coordination, and commitment problems; externalities and other forms of market failure; principal-agent relationships; problems of preference aggregation; and agenda setting and voting. The course also introduces basic concepts in game theory, including Nash equilibrium, subgame Perfection, and repeated games. It is not, however, a suitable substitute for a game theory course for doctoral students in the social sciences. Finally, the course provides an overview of some of the key insights from the field of political economy on how institutions shape and constrain the making of public policy, with special attention to various ways in which governments can and cannot be held accountable to their citizens.

Instructor(s): E. Bueno de Mesquita Terms Offered: Fall

Equivalent Course(s): PPHA 30800, INRE 30800

#### PLSC 30300. Survey of American Politics. 100 Units.

A survey of some of the main themes, topics and approaches in the study of American politics and government. (B)

Instructor(s): E. Oliver Terms Offered: Winter

## PLSC 30500. Introduction to Data Analysis. 100 Units.

This course is an introduction to the research methods practiced by quantitative political scientists. The first part lays out the enterprise of empirical research: the structure and content of theories, the formulation of testable hypotheses, the logic of empirical tests, and the consideration of competing hypotheses. The second part considers the implementation of empirical research: the potential barriers to valid inferences, the strengths and limitations of research designs, and empirical representations of theoretical constructs. The final part provides hands-on experience with the two kinds of analyses most frequently performed by quantitative political researchers: contingency tables and regression. (E)

Instructor(s): M. Dawson Terms Offered: Autumn

Prerequisite(s): Open to Political Science Ph.D. students only.

#### PLSC 30600. Causal Inference. 100 Units.

This is the second course in quantitative methods in Chicago's political science Ph.D. program. The course serves as both an introduction for the mechanisms by which political scientists draw causal inferences using quantitative data as well as an introduction for the basic statistical tools necessary for quantitative research in the social sciences. (E)

Instructor(s): A. Simpser Terms Offered: Winter

#### PLSC 30700. Introduction to Linear Models. 100 Units.

This course will provide an introduction to the linear model, the dominant form of statistical inference in the social sciences. The goals of the course are to teach students the statistical methods needed to pursue independent large-n research projects and to develop the skills necessary to pursue further methods training in the social sciences. Part I of the course reviews the simple linear model (as seen in Stat 220 or its equivalent) with attention to the theory of statistical inference and the derivation of estimators. Basic calculus and linear algebra will be introduced. Part II extends the linear model to the multivariate case. Emphasis will be placed on model selection and specification. Part III examines the consequences of data that is "poorly behaved" and how to cope with the problem. Depending on time, Part IV will introduce special topics like systems of simultaneous equations, logit and probit models, time-series methods, etc. Little prior knowledge of math or statistics is expected, but students are expected to work hard to develop the tools introduced in class. (E)

Instructor(s): M. Hansen Terms Offered: Spring

#### PLSC 32100. Machiavelli: The Prince and Discourses. 100 Units.

This course is a reading and discussion of *The Prince* and the *Discourses on Livy*, supplemented by portions of Livy's *History of Rome*. Themes include the roles of princes, peoples, and elites; the merits of republics and principalities; the political roles of pagan and Christian religion and morality; war and empire; founding and reform; virtue, corruption, and fortune; the relevance of ancient history to modern experience; reading and writing; and theory and practice.(A)

Instructor(s): N. Tarcov Terms Offered: Autumn

Equivalent Course(s): FNDL 29300,SCTH 31710,LLSO 21710,PLSC 20800

#### PLSC 33200. History of International Thought. 100 Units.

The field of International Relations long traced its history through traditions and conceptions (realism, liberalism, anarchy, international society) understood to be derived from a series of founding figures and moments--Grotius, Hobbes, Kant, the 1648 Westphalia treaties, and others. At the same time, the history of international thought was until recently relatively neglected by political theorists and intellectual historians. This course examines some of the most influential "originary" figures and moments for theorists of international relations, alongside recent historical work, in order to reconsider possibilities for international theory and the history of international thought. (A)

Instructor(s): J. Pitts Terms Offered: Spring

Equivalent Course(s): HMRT 33200

#### PLSC 33300. Interpretive Methods in the Social Sciences. 100 Units.

This course is designed to provide students with an introduction to interpretive methods in the social sciences. Students will learn to "read" texts and images while also becoming familiar with contemporary thinking about interpretation, narrative, ethnography, and social construction. Among the methods we shall explore are: semiotics, hermeneutics, ordinary language theory, and discourse analysis. (E) Instructor(s): L. Wedeen Terms Offered: Spring

#### PLSC 33800. Nietzsche's Critique of Modernity. 100 Units.

An examination of Nietzsche's mature philosophical thought, with special attention to *Thus Spoke Zarathustra*, *Beyond Good and Evil*, and *On the Genealogy of Morals*. (A) Instructor(s): R. Gooding-Williams Terms Offered: Spring

#### PLSC 34001. Leviathan. 100 Units.

A close reading of the entirety of Thomas Hobbes' Leviathan. (A)

Instructor(s): J. Cooper Terms Offered: Autumn Equivalent Course(s): PLSC 24001,FNDL 22214

# PLSC 34301. Topics in Black Politics. 100 Units.

Instructor(s): M. Dawson Terms Offered: Winter

#### PLSC 34500. Hannah Arendt's The Human Condition. 100 Units.

This seminar will be devoted to a reading of Hannah Arendt's The Human Condition (1958), one of the most influential works of political theory written in the twentieth century. Through careful study of the meaning and function of Arendt's oftenpuzzling distinctions among "public," "private" and "social" and among "labor," "work," and "action," we'll try to understand her account of the significance and prospects of human activity, including especially political activity, in modernity. Topics of special concern may include: the relation between philosophy and politics; Arendt's relationship to Marx and to the Marxist critique of capitalism; the meanings of work and leisure in the twentieth century and beyond; the nature and basis of political power and freedom; the relations between art and politics; the significance of city life for politics; and many others. While The Human Condition will be at the center of the course, the book will be supplemented and framed by other material, including essays on related subjects by Arendt; excerpts from some of the other thinkers with whom Arendt was in conversation; and material by later writers that will help us situate Arendt in the larger contexts of twentieth-century intellectual life, and which will also give us different angles on some of the key issues in Arendt's book. (A)

Instructor(s): P.Markell Terms Offered: Spring Equivalent Course(s): FNDL 22212, PLSC 24500

# PLSC 35200. Political Theory and Social Neuroscience. 100 Units.

This course utilizes recent advances in cognitive neuroscience to investigate claims by political theorists (both classical and contemporary) about human nature and political organization. Topics include the inter-relationship between affective and cognitive information processes, the physiology of morality, the meaning of self-governance, and the possibility for making essential claims about human nature, particularly as they relate to processes of political organization. Readings will draw from both the political science cannon as well as recent journals and books in neuroscience. (A)

Instructor(s): E. Oliver Terms Offered: Autumn

#### PLSC 35901. Enlightenment Political Thought. 100 Units.

Instructor(s): S. Muthu Terms Offered: Spring

#### PLSC 36100. Civil War. 100 Units.

Civil war is the dominant form of political violence in the contemporary world. This graduate seminar will introduce students to cutting edge scholarly work and to the task of carrying out research on internal conflict. We will study the origins, dynamics, and termination of civil wars, as well as international interventions, post-conflict legacies, and policy responses to war. A variety of research approaches will be explored, including qualitative, quantitative, and interpretive methods, microand macro-level levels of analysis, and sub- and cross-national comparative designs. Our emphasis throughout will be on designing rigorous research that persuasively addresses important questions. (D)

Instructor(s): P. Staniland Terms Offered: Spring

# PLSC 36201. Race, Ethnicity and Politics in Comparative Perspective. 100 Units.

The primary objective of this course is to offer a comparative approach to understanding the relationship between race, inequality, and politics. It focuses primarily on examples from Latin America and the United States, and is organized in three sections. In the first, we explore the relationship between capitalist expansion, the modern-nation, state and the socio-historical construction of "race". In the second section, we explore differences in political elites' approaches to the question of race in the period of nation building. We discuss how different ethnoracial groups were incorporated into, or excluded from, the nation both through legal institutions and nationalist ideologies. In the final section, we analyze the emergence of black and indigenous social movements as a critical response to the failure of the nationalist project. Throughout the course we analyze the different ways race, ethnicity, and identity are understood in these distinct contexts, and also explore how race intersects with other axes of power, such as class and gender. (C) Instructor(s): T. Paschel Terms Offered: Autumn

Equivalent Course(s): LACS 36201

#### PLSC 36601. Political Philosophy and Race. 100 Units.

An examination of some selected, recent treatments of race, racial oppression and racial politics by contemporary philosophers and political theorists. Readings likely to include the work of Tommie Shelby, Elizabeth Anderson, Thomas McCarthy and David Scott among others. (A)

Instructor(s): R. Gooding-Williams Terms Offered: Autumn

#### PLSC 37103. Islam Online. 100 Units.

Research seminar for advanced undergraduates and graduate students on Islam and politics online. The broad themes with which this course will engage include: religion and technological change, interpretive approaches to big data, state power, media and social network activism. (C)

Instructor(s): I. Hussin Terms Offered: Winter

Note(s): Attendance at the first meeting is required for enrollment.

Equivalent Course(s): PLSC 27103

# PLSC 37702. Political Leadership: Historical and Contemporary Perspectives. 100 Units.

This course will examine both classical and contemporary analyses of leadership, with a particular focus on the relationship between executive authority and democratic politics. We will read traditional authors such as Cicero, Livy, Plutarch and Machiavelli as well as contemporary analyses of modern political leadership, especially of the American Presidency. (A)

Instructor(s): W. Howell, J. McCormick Terms Offered: Winter

Note(s): Limited enrollment.

Equivalent Course(s): LLSO 27704,PLSC 27702

#### PLSC 37815. Politics and Public Policy in China. 100 Units.

As the world's most populous country and second largest economy, China stands out for its non-democratic political system. This course has two goals. First, it examines political institutions and behavior in China and the tensions and challenges of political development. It emphasizes how institutions have provided incentives for politicians, how institutions have been shaped and reshaped, and the importance of leadership. Second, it considers various issues of public policy, including state-society relations, the relationship between Beijing and the provinces, development and corruption, population and environment, and the role of the armed forces in society. The course looks at many of these issues from a comparative perspective and introduces a variety of analytic concepts and approaches. This course has a lecture/discussion format for undergraduates and there will be additional work and meetings for graduate students. (C)

Instructor(s): D. Yang Terms Offered: Winter

Equivalent Course(s): PLSC 27815

#### PLSC 38613. Failed States and International Politics. 100 Units.

This course addresses theories and empirical realities of state weakness and failure in comparative perspective and the implications for international politics in terms of security and human rights. The first set of topics will cover the defining characteristics of statehood and measures and discourse of state failure, which will provide the essential theoretical framework from which we can predict and understand the subsequent security and human rights implications of weak and failed states. The second topic will address patterns of internal disorder within these states, specifically civil war and violent non-state actors with a case study focus on the Democratic Republic of Congo. The third topic will address the perceived and potential transnational threats that stem from state collapse, specifically terrorism and the case studies on Afghanistan-Pakistan and Somalia. The final topic will cover the responses and responsibility of the international community to both prevent threats and strengthen state-society relations in weak and failed states. (D) Instructor(s): A. Tiemessen Terms Offered: Autumn

#### PLSC 38800. Weimar Political Theology. 100 Units.

In this course, we will examine the explosion in theological thinking among Jewish intellectuals during the Weimar period. Authors surveyed include Hannah Arendt, Walter Benjamin, Martin Buber, Hermann Cohen, Gershom Scholem, Franz Rosenzweig, and Leo Strauss. (A)

Instructor(s): J. Cooper Terms Offered: Winter

#### PLSC 39401. Arab Uprisings. 100 Units.

This course examines the reasons for and variations in contemporary uprisings in the Middle East. At once theoretical and empirical, the class focuses on events in Tunisia, Egypt, Yemen, Syria, and Libya and considers them in relation to prevailing social scientific theories of change and management. We shall cover the following topics: the causes and meanings of "revolution;" the rise of new social movements in a neoliberal era; the various roles of the military; vigilante justice; the importance of digital publics; popular culture and artistic practices in the context of ongoing tumult; generational conflict; the causes of civil war; authoritarianism and its "reinvention(s);" practices of piety and the role of Islam; and the politics of foreign intervention. (C)

Instructor(s): L. Wedeen Terms Offered: Spring

Equivalent Course(s): PLSC 29401

#### PLSC 39800. Introduction to International Relations. 100 Units.

This course introduces main themes in international relations that include the problems of war and peace, conflict and cooperation. We begin by considering some basic theoretical tools used to study international politics. We then focus on several prominent security issues in modern international relations, such as the cold war and post–cold war world, nuclear weapons, nationalism, and terrorism. We also deal with economic aspects of international relations, such as globalization, world trade, environmental pollution, and European unification. (D)

Instructor(s): C. Lipson Terms Offered: Autumn

Equivalent Course(s): PLSC 29000

#### PLSC 39900. Strategy. 100 Units.

This course covers American national security policy in the post–cold war world, especially the principal issues of military strategy that are likely to face the United States in the next decade. This course is structured in five parts: (1) examining the key changes in strategic environment since 1990, (2) looking at the effects of multipolarity on American grand strategy and basic national goals, (3) focusing on nuclear strategy, (4) examining conventional strategy, and (5) discussing the future of war and peace in the Pacific Rim. (D)

Instructor(s): R. Pape Terms Offered: Spring

Equivalent Course(s): PLSC 28900

#### PLSC 41001. Rule of Law in Comparative Politics. 100 Units.

This graduate seminar explores the concept of "rule of law" and its empirical applications in comparative politics. We begin by scrutinizing the theoretical multi-dimensionality of the concept. The bulk of the course examines empirical studies from the developing and post-communist worlds focusing on formal institutions, enforcement, social capital, and other factors. (C)

Instructor(s): S. Markus Terms Offered: Winter

#### PLSC 41002. Corporate Political Activity. 100 Units.

This is a graduate-level seminar on the political role of modern corporations. How do firms articulate their agenda in the political arena? Other topics include corporate social responsibility, regulatory capture, corporate governance, corruption, etc. Empirical studies will be drawn from diverse regional settings. (C) Instructor(s): S. Markus Terms Offered: Spring

#### PLSC 41101. The Politics of Wealth Redistribution. 100 Units.

How do political institutions affect the structure and scope of wealth redistribution initiatives? This graduate seminar will introduce students to the scholarly literature on redistribution, focusing primarily on recent work. We will study the causes and consequences of redistribution, focusing both on the institutions that shape incentives for governments to implement redistribution, as well as the mechanisms, actors, and international conditions that can erode government incentives or capabilities to redistribute. The emphasis of the course will be twofold: rigorously examining the inferences we can draw from existing work, and designing research that can contribute to a better understanding of the fundamental questions regarding redistributive policies. (C)

Instructor(s): M. Albertus Terms Offered: Autumn

#### PLSC 41203. Political Regimes and Transitions. 100 Units.

Despite a shift toward democracy in much of the world, many states have remained solidly autocratic while others are plagued by political instability. This graduate seminar will introduce students to fundamental questions in the study of political regimes: What distinguishes democracy from dictatorship? How does the functioning of democratic institutions affect democratic survival? Why are some dictatorships more stable than others, and what role do institutions such as legislatures, parties, and elections play in their stability? What political and economic factors explain regime transitions, and why do transitions tend to cluster both spatially and temporally? The course will examine how these questions are addressed in current scholarship, with an emphasis on enabling students to design research projects that contribute to our understanding of how political regimes function, persist, and change. (C)

Instructor(s): M. Albertus Terms Offered: Spring

#### PLSC 41501. Foundations of Realism. 100 Units.

The aim of this course is to explore some of the core concepts and theoretical ideas that underpin realist thinking. Given the richness of the realist tradition and the limits of the quarter system, many important issues cannot be addressed in any detail. (D)

Instructor(s): J. Mearsheimer Terms Offered: Winter

#### PLSC 41600. Liberalism and American Foreign Policy. 100 Units.

This course examines how America's liberal tradition affects its foreign policy. (D) Instructor(s): J. Mearsheimer Terms Offered: Spring

#### PLSC 41601. Political Ethnography. 100 Units.

In this practice-oriented graduate seminar, we explore how to best integrate ethnographic methods into the study of politics. The course aims to introduce graduate students to different perspectives on the possibilities and limitations of ethnographic approaches, as well as allow graduate students to develop their own ethnographic research projects. Scholars across a wide range of disciplines have increasingly used ethnography to better understand the practice of politics. In so doing, they have begun to carve out a methodological approach that might be called political ethnography. We will survey these ethnographic texts written by political scientists, sociologists and anthropologists. We will also analyze the logic of inquiry implicit in ethnographic approaches, as well as address practical issues related to how to conduct ethnographic research. (E)

Instructor(s): T. Paschel Terms Offered: Spring

#### PLSC 42200. Political Science and Law. 100 Units.

This seminar will cover social science approaches to law and legal politics; law and society; rights and democratic change; international and transnational jurisdictions; comparative legal institutions. (C)

Instructor(s): I. Hussin Terms Offered: Spring

Note(s): Attendance at the first meeting is required for enrollment.

# PLSC 42400. Politics, Art, and Aesthetics. 100 Units.

What is the meaning of art for politics? What is the political significance of the differentiation of an "aesthetic" domain of activity and experience in Euro-American modernity? Can aesthetic judgment serve as a model for political judgment? What can the study of art and aesthetics teach us about how and when people experience events, objects, or spaces as (politically) meaningful or engaging? This seminar approaches such questions both historically and thematically, through the close reading and discussion of important works in the philosophy of art and aesthetics, political theory, and art history and criticism. Readings vary. (A) Instructor(s): P. Markell Terms Offered: Winter

#### PLSC 43100. Maximum Likelihood. 100 Units.

The purpose of this course is to familiarize students with the estimation and interpretation of maximum likelihood, a statistical method which permits a close linkage of deductive theory and empirical estimation. Among the problems considered in this course include: models of dichotomous choice, such as turnout and vote choice; models of limited categorical data, such as those for multi-party elections and survey responses; models for counts of uncorrelated events, such as executive orders and bookburnings; models for duration, such as the length of parliamentary coalitions or the tenure of bureaucracies; models for compositional data, such as allocation of time by bureaucrats to task and district vote shares; and models for latent variables, such as for predispositions. The emphasis in this course will be on the extraction of information about political and social phenomena, not upon properties of estimators. (E)

Instructor(s): J. Brehm Terms Offered: Autumn

#### PLSC 43300. Political Psychology. 100 Units.

This course is about how the human mind can shape our attitudes and behaviors in the realm of politics. Do our personalities matter for our political choices? How much does what we learn from others determine our political beliefs, or is it most given by self- interested status? When we introduce heuristics, or cognitive shortcuts, to our decisions, what biases follow? How much of what we think about politics comes from our sense of identity, or those we feel are most similar to? Can we trust political actors, and under what kinds of conditions? When is a message persuasive, and why? (B)

Instructor(s): J. Brehm Terms Offered: Winter

#### PLSC 43820. Plato's REPUBLIC. 100 Units.

This course is devoted to reading and discussion of Plato's *Republic* and some secondary work with attention to justice in the city and the soul, war and warriors, education, theology, poetry, gender, eros, and actually existing cities.

Instructor(s): Nathan Tarcov Terms Offered: Winter 2013

Prerequisite(s): Undergrad course by consent Equivalent Course(s): FNDL 29503,SCTH 31770

#### PLSC 44612. Political Economy of Corruption and Development. 100 Units.

This course is a graduate-level seminar covering recent theoretical and empirical research, organized around the following questions. First, what are the consequences of corruption for socio-economic development? Does corruption help or hinder it? Second, what are the causes of corruption? Is corruption affected by political and economic institutions, regime type, bureaucracy, resource endowments, or culture? Third, why has corruption varied over time within a country or state? On the empirical side, the course will emphasize issues of measurement and inference: how can one draw reliable conclusions about these questions, and what are the pitfalls along the way? The empirical readings encompass qualitative, quantitative, observational, and experimental approaches. (C)

Instructor(s): A. Simpser Terms Offered: Spring

Equivalent Course(s): LACS 44612

#### PLSC 46001. Sources of Order in International Politics. 100 Units.

This course in international relations theory builds on students' prior graduate training to explore four distinct but overlapping sources of international order: coercion, norms, institutions, and contractual bargains. Students will discuss and critique existing literature in all four areas and write a major paper. The course presumes students have had some prior coursework at the graduate level in international relations theory, security studies, or international political economy. (D)

Instructor(s): C. Lipson Terms Offered: Autumn

#### PLSC 46701. Political World of the Indian Ocean. 100 Units.

Politics as viewed through the Indian Ocean world requires close attention to boundaries and borders, but also networks and circulations; to insularity as well as to migration and porosity; to great power politics and their local transformations. Themes include: boundaries and belonging; diaspora; markets and trade; networks; transoceanic Islam; legal transplant and institutional transmission. (C) Instructor(s): I. Hussin Terms Offered: Winter

Note(s): Attendance at the first meeting is required for enrollment.

#### PLSC 47000. Politics without Sovereignty? 100 Units.

In recent years, historical circumstances – European integration, unprecedented levels of global migration, the rise of non-state actors, transnational capital flows – have led political theorists to diagnose the waning of state sovereignty. In this moment, political theorists have also attacked "the sovereign subject" as an impossible and destructive philosophical ideal. In this seminar, we will explore the concept of sovereignty – what it has historically meant, why its viability is currently in doubt, and whether it is possible (or advisable) to envision politics without sovereignty. In the course's first section, we will examine classic early modern formulations of sovereignty. In the following weeks, we will explore contemporary critiques of sovereign subjectivity; contemporary analyses of the ostensible crisis of state sovereignty; and contemporary projects to conceive politics without sovereignty. (A)

Instructor(s): J. Cooper Terms Offered: Autumn

#### PLSC 47403. Carl Schmitt's Political Thought. 100 Units.

This course is devoted to the political thought of controversial conservative Weimar lawyer and National Socialist partisan, Carl Schmitt. We will read and discuss his major works on sovereignty, the exception, legal theory, parliamentary government, liberalism versus democracy, and "the political." Students are expected to come to the first session having read *Political Theology* in its entirety. (A)

Instructor(s): J. McCormick Terms Offered: Autumn

Prerequisite(s): Prior consent of instructor.

Note(s): Seven week course to commence in Week 4.

Equivalent Course(s): FNDL 28305,PLSC 27403

#### PLSC 48700. Crime, Conflict and the State. 100 Units.

Scholars of civil war emphasize the importance, and perhaps primacy, of criminal profits for insurgencies, especially in the post-cold war era. This seminar approaches the issue from the other end of the spectrum: armed conflict between states and "purely" criminal groups. We then expand the focus and explore how crime and political insurgency interact in places like West Africa, Afghanistan, and Latin America. Throughout, we evaluate the concepts, questions and designs underpinning current research. (C)

Instructor(s): B. Lessing Terms Offered: Autumn

#### PLSC 49500. American Grand Strategy. 100 Units.

This course examines the evolution of American grand strategy since 1900, when the United States first emerged on the world stage as a great power. The focus is on assessing how its leaders have thought over time about which areas of the world are worth fighting and dying for, when it is necessary to fight in those strategically important areas, and what kinds of military forces are needed for deterrence and war-fighting in those regions. (D)

Instructor(s): J. Mearsheimer Terms Offered: Winter

Equivalent Course(s): PLSC 28400

#### PLSC 50000. Dissertation Proposal Seminar. 100 Units.

Instructor(s): L. Wedeen Terms Offered: Autumn

#### PLSC 50600. Literature of Japanese Political Institutions. 100 Units.

Instructor(s): B. Silberman Terms Offered: Autumn

#### PLSC 50900. Comparative Case Study Method. 100 Units.

This course will examine the core epistemological and methodological issues surrounding the case study method. (E)

Instructor(s): R. Pape Terms Offered: Spring

# PLSC 52316. Machiavelli's Political Thought. 100 Units.

This course is devoted to the political writings of Niccolò Machiavelli. Readings include *The Prince, Discourses* on Livy's *History of Rome,* selections from the *Florentine Histories,* and Machiavelli's proposal for reforming Florence's republic, "Discourses on Florentine Affairs." Topics include the relationship between the person and the polity; the compatibility of moral and political virtue; the utility of class conflict; the advantages of mixed institutions; the principles of self-government, deliberation, and participation; the meaning of liberty; and the question of military conquest. (A) Instructor(s): J. McCormick Terms Offered: Winter

Prerequisite(s): Prior consent of instructor.

Equivalent Course(s): PLSC 27216,LLSO 28200,FNDL 28102

#### PLSC 55201. Topics in Social Theory. 100 Units.

This is a graduate course in which we read and discuss important texts in social theory. The specific topics and texts vary from year to year. (A)

Instructor(s): W. Sewell Terms Offered: Winter



# DEPARTMENT OF PSYCHOLOGY

#### Chair

 Amanda Woodward Professors

- Sian Beilock
- John T. Cacioppo
- · Jean Decety
- Susan Goldin-Meadow
- · Boaz Keysar
- Susan Cohen Levine
- John A. Lucy, Comparative Human Development
- · Daniel Margoliash, Organismal Biology and Anatomy
- Martha K. McClintock
- Howard C. Nusbaum
- · Brian Prendergast
- · Steven K. Shevell
- · Richard Shweder, Human Development
- Michael Silverstein, Anthropology
- Penelope S. Visser
- Amanda Woodward Associate Professors
- · David Gallo
- · William Goldstein
- Leslie M. Kay

**Assistant Professors** 

- Daniel Casasanto
- · Jasmin Cloutier
- Katherine Kinzler
- Sarah London
- Gregory Norman
   Emeritus Faculty
- R. Darrell Bock
- · Abraham Bookstein, Humanities Division
- Norman M. Bradburn
- Robert A. Butler, Surgery
- Mihaly Csikszentmihalyi
- Eugene T. Gendlin
- Sebastian P. Grossman

- Eric P. Hamp, Linguistics
- Janellen Huttenlocher
- Philip W. Jackson, Education
- Jerre Levy
- Frederick F. Lighthall, Education
- · David McNeill
- Joel M. Pokorny, Ophthalmology and Visual Science
- Allan Rechtschaffen, Psychiatry
- Milton J. Rosenberg
- · Vivianne Smith, Ophthalmology and Visual Science
- · Nancy Lou Stein
- Benjamin D. Wright

Department website: http://psychology.uchicago.edu

The primary focus of the study of psychology is on the individual. Thus, its scope includes the biological processes of brain growth, development and functioning; the perceptual and cognitive processes by which information is acquired, stored, used and communicated; the comprehension, production, and use of language from a psychological viewpoint; the social, cultural, and emotional processes by which experience is interpreted and organized; and the developmental processes that underlie change from infancy through adulthood. Training emphasizes the conceptual theories that describe and explain these processes, and the variety of methods that are used to study them.

Originally founded as the Laboratory of Psychology in 1893, the Department of Psychology has been for a century a leading center of scholarship, research and teaching in psychology and related fields. Among its distinguished faculty and students have been James Rowland Angell, John Dewey, George Herbert Mead, John B. Watson, the founder of behaviorism, L. L. Thurstone, a pioneer in psychological measurement, Karl Lashley, Klüver and Bucy, Kleitman, discoverer of REM sleep, Frank Beach, founder of behavioral endocrinology, W. C. Allee who viewed biology as a social phenomenon, and Roger Sperry, Nobel Prize winner for his work in cerebral lateralization. The present Department of Psychology is conscious of its distinguished intellectual forebears and continues to reflect its heritage in its commitment to research, the scope of its inquiry, and the diversity of its programs of graduate study.

Moreover, consistent with the interdisciplinary traditions of the University of Chicago, the Department of Psychology maintains close connections with other departments in the University. The department's faculty and students actively participate in courses, colloquia, workshops and joint research ventures with scholars in related departments, including, but not confined to, anthropology, biology, computer science, computational neuroscience, linguistics, neurobiology, and philosophy, and in the University's professional schools of business, public policy, law, medicine, and social service administration.

The Department of Psychology is organized into specialized training and research programs that reflect the contemporary state of the discipline as well as wide ranging interests of its own faculty. They are currently the Cognition Program, the Developmental Psychology Program, the Integrative Neuroscience Program, the Perception Program, and the Social Psychology Program. The interdisciplinary character of the University and the Department of Psychology is reflected in the fact that many faculty members serve on more than one of the department's programs.

# **DEGREES**

The course of study offered by the Department of Psychology is designed primarily to prepare students for careers in research and teaching and for whatever professional work is necessary as an adjunct to these career objectives. Programs of graduate study offered by the department lead to the Ph.D. degree in the Division of the Social Sciences. In order to qualify for the Ph.D. degree, students must satisfy:

- 1. The University's residency requirements
- 2. The requirements of the Division of the Social Sciences
- 3. The requirements of the particular program of the Department of Psychology

The Department of Psychology does not offer courses of study leading to the degree of Master of Arts. However, students admitted to doctoral study may take the Master of Arts degree as an optional step in the doctoral program. Similarly, a student admitted who must leave the program, for whatever reason, may apply for a terminal Masters of Arts degree, providing the student has met the University's residency requirements, the requirements of the Division of the Social Sciences, and the program requirements of the particular program of the Department of Psychology.

# PSYCHOLOGY LINGUISTICS JOINT PH.D. PROGRAM

A joint Ph.D. degree program in psychology and linguistics exists for those students who are interested in completing degree requirements in both fields. Psychology students in the Language area of the Cognition Program may apply to the joint degree program in the second year and beyond, but are not required to do so.

# PSYCHOLOGY-BUSINESS JOINT PHD PROGRAM

A joint PhD degree program in psychology and business exists for those students who are interested in completing degree requirements in both fields. This program is overseen jointly by the Department of Psychology and by the Managerial and Organizational Behavior Area in the Booth School of Business. Admission to this program requires admission to both the PhD program in psychology and at Booth School of business. Faculty in both programs will determine, based in a student's primary research interests and/or explicit preferences for a primary research advisor, which program will be the student's primary affiliation.

#### **ADMISSION**

Students are admitted by application to the Department of Psychology to pursue courses of study in doctoral programs that are formulated by the individual programs. Applicants must specify the program to which they are applying. Applicants will be considered for admission only if they have earned a bachelor's degree or its equivalent. Admission depends upon the strength of the general undergraduate record, scores on the Graduate Record Examination, letters of recommendation, personal statement and interests, and relevant laboratory or field research experience. Please refer to the Office of International Affairs web site: https://internationalaffairs.uchicago.edu/students/prospective/toefl.shtml. Foreign language students must provide evidence of English proficiency by submitting scores from either the Test of English as a Foreign Language (TOEFL) or the International English Testing System (IELTS). Candidates for admission are expected to have some background in psychology as well as mathematics and statistics. Candidates with backgrounds in anthropology, history or sociology are encouraged to apply to Psychology, (the Social Psychology Program); those with strong biological training and interests are encouraged to apply to Psychology, (the Integrative Neuroscience Program or the Social Program).

Students are admitted through the Division of the Social Sciences. Students already enrolled in the Department of Linguistics of the Division of the Humanities who wish to work toward the joint Ph.D. In Psychology, (the Language area of the Cognition Program) and in Linguistics must be admitted as well to the Department of Psychology through the Division of the Social Sciences.

# HOW TO APPLY

The application process for admission and financial aid for all Social Sciences graduate programs is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online at: http://applyssd.uchicago.edu/apply/. Most of the required supplemental material can be uploaded into the application.

Questions pertaining to admissions and aid should be directed to admissions@ssd.uchicago.edu or (773) 702-8415. All correspondence and materials that cannot be uploaded should be mailed to:

The University of Chicago Division of the Social Sciences Admissions Office, Foster 105 1130 East 59th Street Chicago, IL 60637

For additional information about the Psychology program, please see: http://psychology.uchicago.edu/ or call 773-702-8861.

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# GENERAL REQUIREMENTS FOR DOCTORAL STUDENTS

All doctoral students in the Department of Psychology must complete the common graduate curriculum. In addition, each student must complete the course requirements specified by one of the department's specialized training and research programs. In exceptional cases, a student may design an individual sequence of courses. This sequence must be approved by the curriculum and student affairs committee before the student undertakes it. Completion of these course requirements is a prerequisite for Ph.D. candidacy.

# COMMON GRADUATE CURRICULUM

The common curriculum consists of a maximum of 11 courses. Other requirements for graduate students will be set by the areas of specialization.

Proseminar: One-quarter course in which faculty members whose primary affiliation is the Department of Psychology give a summary of their ongoing research. This introduces new students to the range of research areas in the department.

Statistics requirement, passed with a grade of B or better:

STAT 22000	Statistical Methods and Applications (or a more advanced STAT course)	100
PSYC 37300	Experimental Design I	100
PSYC 37900	Experimental Design II	100

#### TRIAL RESEARCH SEMINAR

All graduate students are required to take the trial research seminar in the spring of the first year. The purpose of this seminar is to help students formulate and complete their trial research projects.

#### CORE COURSES

Five core courses will be offered each year. Students will be required to take three of these five courses. These courses must be passed with a grade of B or better.

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PSYC 30400	Cognitive Psychology	
PSYC 30700	Sensation and Perception	
PSYC 40300	Advanced Topics in Biological Psychology	
PSYC 40500	Advanced Seminar in Developmental Psychology	
Total Units		300

#### MINOR AREA

Students must take three graduate courses that complements their course of study within psychology. These courses can either be within or outside of psychology (e.g., computer science, neurobiology, linguistics, philosophy, anthropology, mathematics, statistics beyond the courses required, etc.). Regardless, they must provide coherent coverage of an area within psychology or a discipline outside of psychology that is not the student's primary emphasis. These courses should be

chosen in consultation with the student's advisor, and they may be taken pass/fail. The set of three minor courses should be planned and approved before the courses are taken. A document detailing the minor plan, signed by the student and his/her advisor, should delivered to Graduate Student Affairs Administrator by the end of a students' first year of graduate work at the U of Chicago.

# COGNITION PROGRAM

Research on cognition lies at the core of the study of many basic psychological mechanisms (e.g., recognition, attention, categorization, memory, inference) and in recent years, neuroimaging methods have been used to make enormous strides grounding these mechanisms in the brain. Work on cognitive mechanisms has been important in a number of other areas of psychology (e.g., Social Psychology and Developmental Psychology) and provides an important theoretical foundation for understanding higher order cognition including language use, reasoning, and problem solving.

#### Curriculum

There are three elements in the graduate curriculum of the Cognition Program.

- 1. Departmental curriculum. Students must complete the departmental core graduate curriculum. Within this curriculum, there are two requirements specific to cognition students.
- A. They must take PSYC 30400 Cognitive Psychology as one of their three core psychology classes.
- B. They must fulfill the departmental minor area requirement by taking three courses that provide a coherent grounding in some aspect of cognition or cognitive neuroscience. These courses are to be decided on in consultation with the student's advisor, prior to actually taking the courses. It is recommended that students fulfill this requirement through cognitively-oriented courses in anthropology, computer science, human development, linguistics, or neurobiology. Other courses are also acceptable as long as they are relevant to the study of cognition.
- 2. Basic courses. Three basic courses. The following list includes possible courses, including those that are not offered every year. Pre-approved courses are:

PSYC 31200 Systems Neuroscience

PSYC 31500: Neuroethology

PSYC 32000

PSYC 33100

PSYC 33650

PSYC 34214: Cognitive Neuroscience

PSYC 34400 Computational Neuroscience III: Cognitive Neuroscience

PSYC 34700

PSYC 36100

PSYC 37500

PSYC 38300

PSYC 38500

PSYC 39000

PSYC 37400 Human Memory

Students may also propose other courses, based on course offerings in a given year. Such student-proposed courses should be approved by the cognition area chair prior to taking them.

3. Advanced courses and seminars. Students are strongly encouraged to participate in advanced courses and seminars, particularly in their area of interest.

#### THE DEVELOPMENTAL PSYCHOLOGY PROGRAM

There is a strong history of work in developmental psychology at the University of Chicago. The goal of this program is to foster the continuing development of this area by providing a program of study for graduate students and a community of researchers who share an interest in how development occurs. The Developmental Psychology program offers graduate study which investigates child psychology from a variety of perspectives. Four major research areas make up the program: cognitive development, social and emotional development, language and communicative development, and biological development. Specific topics of research specialization include: vocabulary acquisition, the development of gesture and other forms of nonverbal communication, the development of discourse abilities, mathematical and number knowledge in infants and children, the effects of early brain damage on development, social cognitive development in infancy and early childhood, early emotional understanding, the development of autobiographical memory, parent child interaction, language socialization, cultural influences on development, and environmental effects on language development and school achievement. The emphasis is on the use of experimental and observational methods for the study of development.

#### Curriculum

In their third and fourth year students write a theoretical review relevant to their dissertation. Ideally, this review could be a publishable article, suitable for a journal such as a Psychological Bulletin or Developmental Review and will help in formulating the dissertation.

- General course: PSYC 40500 Advanced Seminar in Developmental Psychology is required of all students in the program. A prerequisite for this course is that the student has already taken a survey course in developmental psychology. This course will also fulfill a core course requirement for the common graduate curriculum.
- 2. An advanced course in three of four areas of Developmental Psychology. Certain seminars may also fulfill these requirements. Below are a few examples of courses that will fulfill these requirements. This is not a comprehensive list as course offerings change from year to year. Students may petition the developmental area chair to count courses not included on this list. Topics in

Developmental Psychology along with an additional paper may, under special circumstances, be used towards one course satisfying this requirement, with permission of the developmental area chair.

- A. Cognitive/Intellectual Development: PSYC 42550; PSYC 33600; PSYC 42040
- B. Biological Development:
  PSYC 31700; Psyc 34900: Biopsychology of Attachment (D. Maestripieri);
  PSYC 36100; PSYC 36660; PSYC 44450.
- C. Language/Communicative Development: PSYC 43200; Psyc 35500: Language Socialization (J. Lucy).
- D. Social/Emotional Development: PSYC 43650 The Development of Social Cognition; PSYC 34500 .
- 1. The minor area courses must form a cohesive unit that relates to the student's program of study. It is suggested that the three minor area courses required by the common graduate curriculum be chosen from the following areas: linguistics, computer science, computational neuroscience, neurobiology, statistics, sociology, anthropology, public policy, human development. The minor area courses must form a cohesive unit that relates to the student's program of study.
- Students are expected to take advanced courses and seminars, particularly in their area of interest, and to attend the weekly meeting of Topics in Developmental Psychology

## INTEGRATIVE NEUROSCIENCE

The notion that 100 billion neurons give rise to human behavior proved daunting up through the 20th Century because neuroscientists were limited by existing technologies to studying the properties of single neurons or small groups of neurons. Characterizing simple neural circuits has led to an understanding of a variety of sensory processes, such as the initial steps in vision, and motor processes, such as the generation of locomotion patterns. However, unraveling the neural substrates of more complex behaviors, such as the ability to pay attention to relevant events in its surroundings or the ability to understand the likely events going through the mind of another, remains one of the major challenges for the neurosciences in the twenty-first century. In contrast to simple behaviors, these complex behaviors depend on interactions within a network of different brain structures. Studying the neural bases of complex behaviors, thus, requires an integrative neuroscience approach.

The Integrative Neuroscience graduate program at the University of Chicago is designed to provide the training and research opportunities for the next generation of behavioral, cognitive, and social neuroscientists. Behavioral, cognitive, and social neuroscience represent three complementary and partially overlapping aspects of this integrative neuroscience of mind and behavior. Behavioral neuroscience places an emphasis on the biological mechanisms underlying basic behavioral processes; cognitive neuroscience places an emphasis on the biological mechanisms underlying cognition, with a specific focus on the neural substrates of mental processes and

their behavioral manifestations; and social neuroscience places an emphasis on the biological mechanisms underlying social processes and behavior, including the ability to perceive and communicate mental states including the beliefs and desires of others and to form and maintain interpersonal and group relationships. The University of Chicago is optimally positioned to meet this challenge because its unique academic structure facilitates interactions across disciplinary perspectives.

#### Curriculum

- 1. PSYC 48000 Proseminar in Psychology: One quarter course in which faculty members whose primary affiliation is the Department of Psychology give talks summarizing their on ongoing research
- 2. Statistics (3 courses)
  - A. , or a more advanced statistics course for which Statistics 22000 is a prerequisite.
  - B. PSYC 37300 Experimental Design I
  - C. PSYC 37900 Experimental Design II
- PSYC 42100 Trial Research Seminar(1 course)
   This seminar helps students formulate and complete the Trial Research Project
- Psychology Department Core Courses (3 courses)
   Select 3 courses from PSYC 30400 Cognitive PsychologyPSYC 30700 Sensation and PerceptionPSYC 40300 Advanced Topics in Biological PsychologyPSYC 40500 Advanced Seminar in Developmental PsychologyPSYC 40600
- 5. Minor Area (3 courses)

These courses must be the Neuroscience Cluster courses:

- A. Cellular Neurobiology (Normally taken Autumn of first year)
- B. Survey of Systems Neuroscience (Normally taken Autumn of first year)
- C. Behavioral Neuroscience

The IN program offers the following advanced courses. All of these courses will not be offered every year.

- PSYC 33960
- PSYC 38300
- Advanced Cognitive Neuroscience (Psyc 38760)
- Neural Oscillations (Psyc 37150)
- PSYC 36100
- Neuropsychopharmacology (Psyc 36901)
- PSYC 32000
- PSYC 37400 Human Memory or LM&C
- PSYC 33700
- PSYC 33750
- PSYC 35750
- PSYC 33300
- Attitudes & Persuasion (Psyc 46100)

- PSYC 35950
- PSYC 34700
- PSYC 35000
- PSYC 39000
- PSYC 32600

#### Trial Research Project

Each student completes a Trial Research Project under the guidance of a faculty advisor. This is a significant piece of research carried out over a 12-month period. Both written and oral presentations of the research are required. The written report is due during Spring Quarter of the second year. The oral presentation is required before the end of Spring Quarter of the second year.

# Qualifying Exam

A PhD Qualifying Examination is given at the beginning of the third year.

#### **Doctoral Dissertation**

The Doctoral Dissertation is an independent research project carried out under the guidance of a faculty Dissertation Committee with at least four members. At least two members of the committee, including the chair, must be in the Integrative Neuroscience program; a third member must be in the Department of Psychology. The chair of the committee typically is the primary research advisor. A written dissertation proposal is presented to the committee in advance of an oral Proposal Hearing. The hearing is open to all students and faculty in the Integrative Neuroscience program.

A student is admitted to PhD Candidacy after successfully completing (i) all course requirements, (ii) written and oral presentations of the Trial Research Project, (iii) the Qualifying Exam and (iv) an approved dissertation proposal (including oral defense).

The doctoral dissertation is submitted to the dissertation committee prior to a final oral defense (the "final oral examination"). The dissertation committee plus an outside reader, who may be a faculty member at the University of Chicago or a scientist at another institution, administer the final oral exam. The committee members and reader evaluate the dissertation in private after the oral exam. At most one abstention or vote to disapprove is allowed among the committee members and reader; all others must approve the dissertation to satisfy the requirements for the PhD degree.

# THE SOCIAL PSYCHOLOGY PROGRAM

The general philosophy of the curriculum is to provide students with the requisite knowledge and skills to excel in mainstream, academic social psychology. In addition to Departmental requirements, graduate students in the University of Chicago Social Psychology Program must fulfill the following course requirements:

#### 1. General Courses:

- A. PSYC 40600: Introductory course in experimental social psychology. This course will also fulfill part of the core course requirements of the common graduate curriculum.
- B. Proseminar in Social Psychology: One quarter course in which faculty members in the Chicago Program (but not in the Department of Psychology) give summarizes of ongoing research.
- 2. Topics in Experimental Social Psychology: An ongoing seminar taught collectively by the Core Faculty each quarter. Required of Social Area Students in Years 1-3. Please note: This course is neither required of Joint students nor is it available to them.
- An advanced course or seminar in at least two of the following Areas of Emphasis:
  - Self
  - Social Cognition
  - Social and Cognitive Neuroscience
  - Decision Making
  - · Attitudes and Affect
  - Stereotyping and Prejudice
  - Communication and Language Processes
  - Interpersonal Relations and Group Processes
  - Political Psychology
  - Cultural Psychology
- 4. PSYC 45200 plus two additional courses in advanced methods and statistics.
- 5. Finally, students are expected to take advanced courses and seminars in their area of interest.

#### RESEARCH REQUIREMENTS

# Trial Research Project

Each student in the Department of Psychology will complete a trial research project under the guidance of a faculty advisor or advisors by the end of the seventh week of the spring quarter of the second year. Each student's trial research committee consists of the advisor and two other faculty members.

#### Dissertation

Each student in the Department of Psychology will complete a dissertation under the guidance of a faculty advisor or advisors. The committee consists of the advisor, two other members of the faculty, and an outside reader.

#### **Evaluations**

All students in the Department of Psychology are evaluated at the end of the spring quarter each year. The evaluation at the end of the second year is particularly important, as it determines whether a student will be admitted to candidacy and permitted to conduct dissertation research.

#### **PSYCHOLOGY COURSES**

#### PSYC 30400. Cognitive Psychology. 100 Units.

Viewing the brain globally as an information processing or computational system has revolutionized the study and understanding of intelligence. This course introduces the theory, methods, and empirical results that underlie this approach to psychology. Topics include categorization, attention, memory, knowledge, language, and thought.

Instructor(s): D. Gallo Terms Offered: Spring

#### PSYC 30700. Sensation and Perception. 100 Units.

This course centers on visual and auditory phenomena. Aside from the basic sensory discriminations (acuity, brightness, loudness, color, and pitch), more complex perceptual events, such as movement and space, are discussed. The biological underpinnings of these several phenomena are considered, as well as the role of learning in perception.

Instructor(s): H. Nusbaum Terms Offered: Spring

# PSYC 31200. Systems Neuroscience. 100 Units.

This course meets one of the requirements of the neuroscience specialization. This course introduces vertebrate and invertebrate systems neuroscience with a focus on the anatomy, physiology, and development of sensory and motor control systems. The neural bases of form and motion perception, locomotion, memory, and other forms of neural plasticity are examined in detail. We also discuss clinical aspects of neurological disorders.

Instructor(s): M. Hale, D. Freedman Terms Offered: Spring

Prerequisite(s): BIOS 24204 or consent of instructor

Equivalent Course(s): BIOS 24205, PSYC 24000

# PSYC 31600. Biopsychology of Sex Differences. 100 Units.

This course will explore the biological basis of mammalian sex differences and reproductive behaviors. We will consider a variety of species, including humans. We will address the physiological, hormonal, ecological and social basis of sex differences. To get the most from this course, students should have some background in biology, preferably from taking an introductory course in biology or biological psychology. (A, 1)

Instructor(s): J. Mateo Terms Offered: Autumn

Note(s): Not offered 2013-14

Equivalent Course(s): EVOL 36900, GNSE 30901, CHDV 30901

#### PSYC 31900. Language, Culture, and Thought. 100 Units.

Survey of research on the interrelation of language, culture, and thought from the evolutionary, developmental, historical, and culture-comparative perspectives with special emphasis on the mediating methodological implications for the social sciences.(B\*, C\*; 2\*, 3\*, 5\*)

Instructor(s): J. Lucy Terms Offered: Spring

Equivalent Course(s): CHDV 21901,ANTH 27605,ANTH 37605,CHDV 31901,HDCP 41950,PSYC 21950

#### PSYC 32411. Mediation, Moderation, and Spillover Effects. 100 Units.

This course is designed for graduate students and advanced undergraduate students from social sciences, statistics, health studies, public policy, and social services administration who will be or are currently involved in quantitative research. The course is focused on methodological issues with regard to mediation of intervention effects, moderated intervention effects, cumulative effects of treatment sequences, and spillover effects in a variety of settings. Research questions about why an intervention works, for whom, under what conditions, in what sequence, and whether one individual's treatment could affect other individuals' outcomes are often key to the advancement of scientific knowledge yet pose major analytic challenges. (M)

Instructor(s): G. Hong Terms Offered: Autumn

Note(s): Not offered 2013-14

Equivalent Course(s): PBPL 29411, STAT 33211, CCTS 32411, CHDV 32411

#### PSYC 33000. Cultural Psychology. 100 Units.

There is a substantial portion of the psychological nature of human beings that is neither homogeneous nor fixed across time and space. At the heart of the discipline of cultural psychology is the tenet of psychological pluralism, which states that the study of "normal" psychology is the study of multiple psychologies and not just the study of a single or uniform fundamental psychology for all peoples of the world. Research findings in cultural psychology thus raise provocative questions about the integrity and value of alternative forms of subjectivity across cultural groups. In this course we analyze the concept of "culture" and examine ethnic and cross-cultural variations in mental functioning with special attention to the cultural psychology of emotions, self, moral judgment, categorization, and reasoning. (B\*, C\*; 2\*, 3\*) Instructor(s): R. Shweder Terms Offered: Autumn

Prerequisite(s): Third- or fourth-year standing. Instructor consent required. Equivalent Course(s): CHVD 31000,PSYC 23000,ANTH 24320,ANTH 35110,HDCP 41050,GNSE 21001,GNSE 31000,AMER 33000,CHDV 21000

#### PSYC 33160. The Moral Brain. 100 Units.

The past decade has seen an explosion of empirical research in the study of morality. Amongst the most exciting and novel findings and theories, evolutionary biologists and comparative psychologists have shown that moral cognition has evolved to facilitate cooperation and smooth social interactions, and that certain components of morality are present in non-human animals. Developmental psychologists came up with ingenious paradigms, demonstrating that the elements that underpin morality are in place much earlier than we thought, and clearly in place before children turn two. Social neuroscientists have begun to map brain circuits implicated in moral decision-making and identify the contribution of neuropetides to moral sensitivity. Changes in the balance of brain chemistry, or in connectivity between regions can cause changes in moral behavior. The lesson from all this new knowledge is clear: human moral behavior cannot be separated from human biology, its development, and past evolutionary history. As our understanding of the human brain improves, society at large, and justice and the law in particular, are and will be increasingly challenged. The goal of this seminar is to provide an overview of the current research on the moral brain, and examine this fascinating topic from a range of relevant interdisciplinary perspectives. These perspectives will include anthropology and neuro-philosophy, evolution, development, social neuroscience, psychopathology, and justice and the law.

Instructor(s): J. Decety Terms Offered: Autumn

Equivalent Course(s): PSYC 23160

# PSYC 34400. Computational Neuroscience III: Cognitive Neuroscience. 100 Units.

This course is concerned with the relationship of the nervous system to higher order behaviors (e.g., perception, action, attention, learning, memory). Psychophysical, functional imaging, and electrophysiological methods are introduced. Mathematical and statistical methods (e.g., neural networks, information theory, pattern recognition for studying neural encoding in individual neurons and populations of neurons) are discussed. Weekly lab sections allow students to program cognitive neuroscientific experiments and simulations.

Instructor(s): N. Hatsopoulos Terms Offered: Spring

#### PSYC 34410. Computational Approaches for Cognitive Neuroscience. 100 Units.

This course is concerned with the relationship of the nervous system to higher order behaviors such as perception and encoding, action, attention, and learning and memory. Modern methods of imaging neural activity are introduced, and information theoretic methods for studying neural coding in individual neurons and populations of neurons are discussed.

Instructor(s): N. Hatsopoulos Terms Offered: Spring

Prerequisite(s): BIOS 24222 or CPNS 33100 Equivalent Course(s): ORGB 34650,CPNS 33200

PSYC 36210-36211. Mathematical Methods for Biological Sciences I-II.

#### PSYC 36210. Mathematical Methods for Biological Sciences I. 100 Units.

This course builds on the introduction to modeling course biology students take in the first year (BIOS 20151 or 152). It begins with a review of one-variable ordinary differential equations as models for biological processes changing with time, and proceeds to develop basic dynamical systems theory. Analytic skills include stability analysis, phase portraits, limit cycles, and bifurcations. Linear algebra concepts are introduced and developed, and Fourier methods are applied to data analysis. The methods are applied to diverse areas of biology, such as ecology, neuroscience, regulatory networks, and molecular structure. The students learn computations methods to implement the models in MATLAB.

Instructor(s): D. Kondrashov Terms Offered: Autumn. L

Prerequisite(s): BIOS 20151 or BIOS 20152 or consent of the instructor

Equivalent Course(s): BIOS 26210, CPNS 31000

#### PSYC 36211. Mathematical Methods for Biological Sciences II. 100 Units.

This course is a continuation of BIOS 26210. The topics start with optimization problems, such as nonlinear least squares fitting, principal component analysis and sequence alignment. Stochastic models are introduced, such as Markov chains, birth-death processes, and diffusion processes, with applications including hidden Markov models, tumor population modeling, and networks of chemical reactions. In computer labs, students learn optimization methods and stochastic algorithms, e.g. Markov Chain Monte Carlo and Gillespie algorithm. Students complete an independent project on a topic of their interest. Instructor(s): D. Kondrashov Terms Offered: Winter. L.

Prerequisite(s): BIOS 26210

Equivalent

Equivalent Course(s): BIOS 26211, CPNS 31100

#### PSYC 36211. Mathematical Methods for Biological Sciences II. 100 Units.

This course is a continuation of BIOS 26210. The topics start with optimization problems, such as nonlinear least squares fitting, principal component analysis and sequence alignment. Stochastic models are introduced, such as Markov chains, birth-death processes, and diffusion processes, with applications including hidden Markov models, tumor population modeling, and networks of chemical reactions. In computer labs, students learn optimization methods and stochastic algorithms, e.g. Markov Chain Monte Carlo and Gillespie algorithm. Students complete an independent project on a topic of their interest.

Instructor(s): D. Kondrashov Terms Offered: Winter. L.

Prerequisite(s): BIOS 26210

Equivalent

Equivalent Course(s): BIOS 26211, CPNS 31100

PSYC 37300-37900. Experimental Design I-II.

Experimental Design I-II

#### PSYC 37300. Experimental Design I. 100 Units.

This course covers topics in research design and analysis. They include multifactor, completely randomized procedures and techniques for analyzing data sets with unequal cell frequencies. Emphasis is on principles, not algorithms, for experimental design and analysis.

Instructor(s): S. Shevell Terms Offered: Winter

#### PSYC 37900. Experimental Design II. 100 Units.

Experimental Design II covers more complex ANOVA models than in the previous course, including split-plot (repeated-measures) designs and unbalanced designs. It also covers analysis of qualitative data, including logistic regression, multinomial logit models, and log linear models. An introduction to certain advanced techniques useful in the analysis of longitudinal data, such as hierarchical linear models (HLM), also is provided. For course description contact Psychology.

Instructor(s): S. Shevell Terms Offered: Spring

#### PSYC 37400. Human Memory. 100 Units.

This course surveys the scientific study of human memory, emphasizing both theory and applications. Lectures will cover current research and methods in cognitive psychology and cognitive neuroscience, as well as historical precursors and classic studies. Topics include consciousness and nonconscious processes, corresponding neural systems, and various phenomena such as amnesia, memory distortion, mnemonics, and metacognition.

Instructor(s): D. Gallo Terms Offered: Autumn

#### PSYC 37900. Experimental Design II. 100 Units.

Experimental Design II covers more complex ANOVA models than in the previous course, including split-plot (repeated-measures) designs and unbalanced designs. It also covers analysis of qualitative data, including logistic regression, multinomial logit models, and log linear models. An introduction to certain advanced techniques useful in the analysis of longitudinal data, such as hierarchical linear models (HLM), also is provided. For course description contact Psychology.

Instructor(s): S. Shevell Terms Offered: Spring

#### PSYC 39800. Topics in Experimental Social Psychology. 000 Units.

Instructor(s): J. Cacioppo, J. Cloutier Terms Offered: Winter

#### PSYC 39900. Topics in Experimental Social Psychology. 100 Units.

Instructor(s): J. Cacioppo, J. Cloutier Terms Offered: Spring

#### PSYC 40107. Behavioral Neuroscience. 100 Units.

This course is concerned with the structure and function of systems of neurons, and how these are related to behavior. Common patterns of organization are described from the anatomical, physiological, and behavioral perspectives of analysis. The comparative approach is emphasized throughout. Laboratories include exposure to instrumentation and electronics, and involve work with live animals. A central goal of the laboratory is to expose students to in vivo extracellular electrophysiology in vertebrate preparations. Laboratories will be attended only on one day a week but may run well beyond the canonical period.

Instructor(s): D. Margoliash Terms Offered: Winter Equivalent Course(s): NURB 30107,CPNS 30107

# PSYC 40300. Advanced Topics in Biological Psychology. 100 Units.

What are the relations between mind and brain? How do brains regulate mental, behavioral, and hormonal processes; and how do these influence brain organization and activity? This course provides an introduction to the anatomy, physiology, and chemistry of the brain; their changes in response to the experiential and sociocultural environment; and their relation to perception, attention, behavior, action, motivation, and emotion.

Instructor(s): B. Prendergast Terms Offered: Winter

#### PSYC 40450-40451-40452. Topics in Cognition I-II-III.

Broadly speaking, this workshop will address fundamental topics in cognitive psychology such as attention, memory, learning, problem solving, and language. One unique aspect of this workshop is that we will not only explore topics central to the study of cognition, but we will also explore how the study of cognitive psychology can be used to enhance human potential and performance in a variety of contexts. These contexts range from an exploration of optimal teaching practices to enhance the acquisition of mathematical knowledge in the classroom, to issues regarding how individuals communicate best to foster the optimal exchange of information in, for instance, medical settings, to the optimal strategies older adults can use to help stave off the deleterious effects of aging on cognitive functioning and the performance of everyday activities.

PSYC 40450. Topics in Cognition I. 100 Units.

Instructor(s): S. Beilock

PSYC 40451. Topics in Cognition II. 100 Units. Instructor(s): S. Beilock Terms Offered: Winter

PSYC 40452. Topics in Cognition III. 100 Units. Instructor(s): S. Beilock Terms Offered: Spring

PSYC 40451. Topics in Cognition II. 100 Units. Instructor(s): S. Beilock Terms Offered: Winter

PSYC 40452. Topics in Cognition III. 100 Units. Instructor(s): S. Beilock Terms Offered: Spring

## PSYC 40500. Advanced Seminar in Developmental Psychology. 100 Units.

This is an introductory course for graduate students in developmental psychology. Topics in biological, perceptual, cognitive, social, and language development will be covered. This course will satisfy one of Psychology graduate students' core course requirements.

Instructor(s): S. Goldin-Meadow, A. Woodward Terms Offered: Autumn

# PSYC 40851-40852-40853. Topics in Developmental Psychology I-II-III.

Brown-bag discussion of current research in psychology.

#### PSYC 40851. Topics in Developmental Psychology I. 100 Units.

Instructor(s): A. Woodward, L. Richland Terms Offered: Autumn

Note(s): Topic: Comparative Human Development

Equivalent Course(s): CHDV 40851

#### PSYC 40852. Topics in Developmental Psychology II. 100 Units.

Instructor(s): S. Beilock Terms Offered: Winter

# PSYC 40853. Topics in Developmental Psychology III. 100 Units.

Instructor(s): K. Kinzler

Note(s): Topic: Social Cognition

#### PSYC 40852. Topics in Developmental Psychology II. 100 Units.

Instructor(s): S. Beilock Terms Offered: Winter

#### PSYC 40853. Topics in Developmental Psychology III. 100 Units.

Instructor(s): K. Kinzler

Note(s): Topic: Social Cognition

#### PSYC 41000. Advanced Topics in Color Vision. 100 Units.

Instructor(s): S. Shevell Terms Offered: Autumn

Prerequisite(s): Permission of instructor. Equivalent Course(s): OPTH 41000

#### PSYC 41210. Psychophysiology: Methods, Concepts, and Applications. 100 Units.

This course will provide an overview of the principles, theory, and applications of psychophysiological research. The course has two primary goals: (1) to provide an overview of major psychophysiological approaches and measures through discussion of contemporary research; and (2) to provide an introduction to theory and research in major areas of human psychophysiology with specific applications to the study of cognition, affect, and health.

Instructor(s): G. Norman Terms Offered: Autumn

#### PSYC 41450. Evolutionary Psychology. 100 Units.

This course explores human social behavior from the perspective of a new discipline: evolutionary psychology. In this course we will read and discuss articles in which evolutionary theory has been applied to different aspects of human behavior and social life such as: developmental sex differences, cooperation and altruism, competition and aggression, physical attractiveness and mating strategies, incest avoidance and marriage, sexual coercion, parenting and child abuse, language and cognition, and psychological and personality disorders. (A, 1)

Instructor(s): D. Maestriperi, D. Gallo Terms Offered: Winter

Prerequisite(s): Undergraduates must have permission of instructor.

Note(s): Not offered 2013-14

Equivalent Course(s): CHDV 41451, CHDV 37801

# PSYC 41610. Topics in Neurobiology of Learning. 100 Units.

This seminar will focus on an examination of basic mechanisms of learning, both those that have been theoretically linked such as putative computational descriptions and cellular mechanisms, as well as those with clear empirical support. We will read and discuss a wide range of current studies examining evidence testing specific theories in the neurobiology of learning across levels of analysis and using comparative approaches. The course will emphasize recent findings in learning research and consider methodological and theoretic issues in designing new studies. Instructor(s): H. Nusbaum Terms Offered: Autumn

#### PSYC 41850. Graduate Seminar. 100 Units.

Instructor(s): B. Keysar Terms Offered: Winter

#### PSYC 42100. Trial Research Seminar. 100 Units.

PSYC 42100 is required of first-year Psychology graduate students The purpose of this seminar is to assist students in formulating their trial research project.

Instructor(s): TBD

#### PSYC 42400. Teaching Psychology. 100 Units.

Instructor(s): J. Cacioppo Terms Offered: Autumn

Prerequisite(s): Psychology graduate students who TA for PSYC 20000.

#### PSYC 43550. Gesture. 100 Units.

This course will examine the spontaneous movements that we produce when we talk—our gestures. We will first consider what gesture is (and is not), and then explore gesture in relation to communication, thinking, learning, action, and the brain, ending with an exploration of gesture as it becomes language, on-the-spot and over longer periods of time.

Instructor(s): S. Goldin-Meadow Terms Offered: Winter

Equivalent Course(s): CHDV 43550

#### PSYC 43600. Processes of Judgement and Decision Making. 100 Units.

This course offers a survey of research on judgment and decision making, with emphasis placed on uncertainty and (intrapersonal) conflict. An historical approach is taken in which the roots of current research issues and practices are traced. Topics are drawn from the following areas: evaluation and choice when goals are in conflict and must be traded off, decision making when consequences of the decision are uncertain, predictive and evaluative judgments under conditions of uncertain, incomplete, conflicting, or otherwise fallible information.

Instructor(s): W. Goldstein Terms Offered: Winter

Equivalent Course(s): CHDV 43600

# PSYC 43650. The Development of Social Cognition. 100 Units.

This course explores current topics in the development of human social cognition. We will evaluate infants' and children's reasoning about other individuals -- including those individuals minds, their relationships, and their social identities -- with the goal of exploring the developmental origins and foundations of social cognition. Sample topics include theory of mind, morality, social learning, psychological essentialism, and intergroup attitudes. Particular attention will be given to the relationship of early social processes to those observed in adulthood. Instructor(s): K. Kinzler Terms Offered: Spring

#### PSYC 43850. Multisensory Integration. 100 Units.

We will cover neurophysiological aspects of multimodal sensory perception. The class will be partly lecture and partly seminar, covering current scientific literature in human and other animal models at a high level of neuroscientific detail. Some of the topics to be covered: multisensory convergence, top-down influences of one sensory modality on another, and temporal aspects of sensory integration and interference. Prerequisites: graduate standing and background equivalent to first year Neuroscience courses in Integrative Neuroscience, Neurobiology or Computational Neuroscience graduate programs (e.g., Cellular Neurobiology, Systems Neuroscience and Behavioral Neuroscience).

Instructor(s): L. Kay Terms Offered: Spring

Prerequisite(s): Graduate standing and background in neuroscience.

#### PSYC 44000. Moral Development and Comparative Ethics. 100 Units.

Three types of questions about morality can be distinguished: (1) philosophical, (2) psychological, and (3) epidemiological. The philosophical question asks, whether and in what sense (if any) "goodness" or "rightness" are real or objective properties that particular actions possess in varying degrees. The psychological question asks, what are the mental states and processes associated with the human classification of actions are moral or immoral, ethical or unethical. The epidemiological question asks, what is the actual distribution of moral judgments across time (developmental time and historical time) and across space (for example, across cultures). In this seminar we will read classic and contemporary philosophical, psychological, and anthropological texts that address those questions. (B, C; 3)

Instructor(s): R. Shweder Terms Offered: Autumn

Note(s): Graduate students only. Equivalent Course(s): CHDV 45601

## PSYC 44700. Seminar: Topics in Judgement and Decision Making. 100 Units.

This course offers a survey of research on judgment and decision making, with emphasis placed on uncertainty and (intrapersonal) conflict. An historical approach is taken in which the roots of current research issues and practices are traced. Topics are drawn from the following areas: evaluation and choice when goals are in conflict and must be traded off, decision making when consequences of the decision are uncertain, predictive and evaluative judgments under conditions of uncertain, incomplete, conflicting, or otherwise fallible information.

Instructor(s): W. Goldstein Terms Offered: Spring

Equivalent Course(s): CHDV 44700

# PSYC 45300. When Cultures Collide: The Multicultural Challenge in Liberal Democracy. 100 Units.

Coming to terms with diversity in an increasingly multicultural world has become one of the most pressing public policy projects for liberal democracies in the early 21st century. One way to come to terms with diversity is to try to understand the scope and limits of toleration for variety at different national sites where immigration from foreign lands has complicated the cultural landscape. This seminar examines a series of legal and moral questions about the proper response to norm conflict between mainstream populations and cultural minority groups (including old and new immigrants), with special reference to court cases that have arisen in the recent history of the United States. (3\*)

Instructor(s): R. Shweder Terms Offered: Winter

Equivalent Course(s): ANTH 45600, HMRT 35600, GNDR 45600, CHDV 45600

# PSYC 45550. From Birds to Words: How Do Communication Systems Come About? 100 Units.

This course will examine commonalities in the development and organization of communication across animals (birds and people) who are not closely linked evolutionarily. In this way, we hope to explore essential elements of social communication (what they are, which elements are flexible with respect to species, time, cultural specificity). Our goal is to start with behaviors that are shared across birds and humans, and unravel deeper shared mechanisms across organisms that rely on complex communication systems over different timespans (evolution, ontogeny).

Instructor(s): S. Goldin-Meadow, S. London Terms Offered: Spring Equivalent Course(s): CHDV 45550

#### PSYC 45603. Professional Development and the Academic Job Market. 100 Units.

This course is geared toward senior graduate students with an interest in pursuing the academic job market. Students will work to develop and practice an effective colloquium-length talk, and they will provide and receive feedback from their peers on research and teaching statements.

Instructor(s): K. Kinzler Terms Offered: Autumn Prerequisite(s): For Psychology PhD students only.

#### PSYC 45660. Translational Research in Social Neuroscience. 100 Units.

Social neuroscience is an interdisciplinary field devoted to understanding how biological systems regulate social processes and behavior, and how the social environment impacts the brain and biology. Social Neuroscience has provided insight into the neurobiological mechanisms underlying social cognition, social motivation and communication in humans and non-human animals. Moreover, this approach has revealed many of the transduction mechanisms that allow social information (i.e. perceived rejection, social status) to get under the skin and influence fundamental biological processes ranging from gene expression and apoptosis to immune function and cardiovascular activity. This course will cover contemporary debates in Neuroscience and discuss the current challenges faced by researchers in the field.

Instructor(s): G. Norman Terms Offered: Winter

#### PSYC 47001-47002. Language in Culture I-II.

This two-quarter course presents the major issues in linguistics of anthropological interest. These courses must be taken in sequence.

#### PSYC 47001. Language in Culture I. 100 Units.

Among topics discussed in the first half of the sequence are the formal structure of semiotic systems, the ethnographically crucial incorporation of linguistic forms into cultural systems, and the methods for empirical investigation of "functional" semiotic structure and history.

Instructor(s): M. Silverstein Terms Offered: Autumn

Prerequisite(s): Consent of instructor

Equivalent Course(s): ANTH 37201, CHDV 37201, LING 31100

#### PSYC 47002. Language in Culture II. 100 Units.

The second half of the sequence takes up basic concepts in sociolinguistics and their critique.

Instructor(s): C. Nakassis Terms Offered: Winter

Prerequisite(s): Consent of instructor

Equivalent Course(s): ANTH 37202, LING 31200

#### PSYC 47002. Language in Culture II. 100 Units.

The second half of the sequence takes up basic concepts in sociolinguistics and their critique.

Instructor(s): C. Nakassis Terms Offered: Winter

Prerequisite(s): Consent of instructor

Equivalent Course(s): ANTH 37202, LING 31200

#### PSYC 48000. Proseminar in Psychology. 100 Units.

Required of first-year Department of Psychology graduate students. Department of Psychology faculty members present and discuss their research. This introduces new students to the range of research areas in the department.

Instructor(s): S. London Terms Offered: Autumn

#### PSYC 48001-48002-48003. Mind and Biology Proseminar I-II-III.

Seminar series at the Institute for Mind and Biology meets three to four times per quarter. Sign up for three quarters; receive credit at the end of Spring Quarter.

PSYC 48001. Mind and Biology Proseminar I. 000 Units.

Instructor(s): TBD

PSYC 48002. Mind and Biology Proseminar II. 000 Units.

Instructor(s): TBD

PSYC 48003. Mind and Biology Proseminar III. 100 Units.

Instructor(s): TBD

PSYC 48002. Mind and Biology Proseminar II. 000 Units.

Instructor(s): TBD

PSYC 48003. Mind and Biology Proseminar III. 100 Units.

Instructor(s): TBD



# THE JOHN U. NEF COMMITTEE ON SOCIAL THOUGHT

#### Chair

- Robert Pippin Professors
- Lorraine Daston
- Vincent Descombes
- · Wendy Doniger
- Hans Joas
- Irad Kimhi
- · Gabriel Lear
- Jonathan Lear
- Jean Luc Marion
- · Heinrich Meier
- · Glenn W. Most
- · David Nirenberg
- · Thomas Pavel
- · Mark Payne
- Robert B. Pippin
- · James M. Redfield
- Haun Saussy
- · Laura Slatkin
- · Nathan Tarcov
- Rosanna Warren
- David Wellbery
- Adam Zagajewski

#### Emeriti

- Paul Friedrich
- · Leon Kass
- Joel Kraemer
- · Ralph Lerner
- David Tracy
- Anthony C. Yu

The John U. Nef Committee on Social Thought was established as a degree granting body in 1941 by the historian John U. Nef (1899-1988), with the assistance of the economist Frank Knight, the anthropologist Robert Redfield, and Robert M. Hutchins, then President of the University. The Committee is a group of diverse scholars sharing a common concern for the unity of the human sciences. Their

premises were that the serious study of any academic topic, or of any philosophical or literary work, is best prepared for by a wide and deep acquaintance with the fundamental issues presupposed in all such studies, that students should learn about these issues by acquainting themselves with a select number of classic ancient and modern texts in an inter-disciplinary atmosphere, and should only then concentrate on a specific dissertation topic. It accepts qualified graduate students seeking to pursue their particular studies within this broader context, and aims both to teach precision of scholarship and to foster awareness of the permanent questions at the origin of all learned inquiry.

The primary themes of the Committee's intellectual life have continued to be literature, religion, philosophy, politics, history, art and society. The Committee differs from the normal department in that it has no specific subject matter and is organized neither in terms of a single intellectual discipline nor around any specific interdisciplinary focus. It exists to bring together scholars in a variety of fields sharing a concern with basic and trans-disciplinary issues, and to enable them to work in close intellectual association with other like-minded graduate students seeking to pursue their particular studies in this broader context. Inevitably, the faculty of the Committee does not encompass within itself the full range of intellectual disciplines necessary for these studies, and the fields represented by the faculty have changed substantially during the Committee's history. Students apply to work with the faculty who are here at any particular time and, where appropriate, with other faculty at the University of Chicago. Although it offers a variety of courses, seminars, and tutorials, it does not require specific courses. Rather, students, with the advice of Committee faculty, discover the points at which study in established disciplines can shape and strengthen their research, and they often work closely with members of other departments. Through its several lecture and seminar series, the Committee also seeks to draw on the intellectual world beyond the University.

Students admitted to the Committee work toward the Ph.D. There are three principal requirements for this degree: the fundamentals examination, the foreign language examination and the dissertation. Study for the fundamental exam centers on twelve to fifteen books, selected by the student in consultation with the faculty. Each student is free to draw from the widest range of works of imaginative literature, religious thought, philosophy, history, political thought, and social theory and ranging in date from classical times to the twentieth century. Non-Western books may also be included. Study of these fundamental works is intended to help students relate their specialized concerns to the broad themes of the Committee's intellectual life. Some of the student's books will be studied first in formal courses offered by faculty, though books may also be prepared through reading courses, tutorials, or independent study.

Preparation for the fundamentals examination generally occupies the first two or three years of a student's program, together with appropriate philological, statistical, and other disciplinary training.

After successful completion of the fundamentals examination, the student writes a dissertation under faculty supervision on an important topic using appropriately specialized skills. A Committee on Social Thought dissertation is expected to combine exact scholarship with broad cultural understanding and literary merit. In lieu of an oral defense, a public lecture on an aspect of their research of general interest to the scholarly community is to be given.

As a partial guide, and to suggest the variety of possible programs, there follows a list of titles of some of the dissertations accepted by the Committee since 1994:

- Heidegger's Polemos: From Being to Politics
- Nature's Artistry: Goethe's Science and Die Wahlverwandtschaften
- Nietzsche's Schopenhauer: The Peak of Modernity and the Problem of Affirmation
- · Feminism and Liberalism: The Problem of Equality
- A Hesitant Dionysos: Nietzsche and the Revelry of Intuition
- · Conrad's Case Against Thinking
- · Reading the Republic as Plato's Own Apology
- Cartesian Theodicy: Descartes Quest for Certitude
- Plato's Gorgias and the Power of Speech and Reason in Politics
- · World Government and the Tension between Reason and Faith in
- Dante Alighieri's Monarchia
- · A House Divided: The Tragedy of Agamemnon
- Eros and Ambition in Greek Political Thought
- Natural Ends and the Savage Pattern: The Unity of Rousseau's Thought
- Revisited
- A Sense of Place. Reading Rousseau: The Idea of Natural Freedom
- Churchill's Military Histories: A Rhetorical Study
- A Nation of Agents: The Making of the American Social Character
- The Problem of Religion in Spinoza's Tractatus Theologico Politicus
- A Great Arrangement of Mankind: Edmund Burke's Principles and Practice of Statesmanship
- The Dance of the Muses
- Tocqueville Unveiled: A Historian and his Sources in L Ancien Régime et la Révolution
- The Search for Biological Causes of Mental Illness
- War, Politics, and Writing in Machiavelli's Art of War
- Plato's Laws on the Roots and Foundation of the Family
- The Philosophy of Friendship: Aristotle and the Classical Tradition on Friendship and Self Love
- Regions of Sorrow: Spaces of Anxiety and Messianic Tome in Hannah Arendt and W.H. Auden
- Converting the Saints: An Investigation of Religious Conflict using a Study of Protestant Missionary Methods in an Early 20th Century Engagement with Mormonism

- The Significance of Art in Kant's Critique of Judgment
- · Historicism and the Theory of the Avant Garde
- Human Freedom in the Philosophy of Pierre Gassendi
- Taking Her Seriously: Penelope and the Plot of Homer's Odyssey
- Karna in the Mahabharata
- Hegel on Mind, Action, and Social Life: The Theory of Geist as a Theory of Explanation. Liberalism in the Shadow of Totalitarianism: The Problem of Authority and Values Since World War Two
- Nietzsche's Problem of Socrates and Plato's Political Psychology
- Tocqueville's New Political Science: A Critical Assessment of Montesquieu's Vision of a Liberal Modernity
- · Magnanimity and Modernity: Self Love in the Scottish Enlightenment
- Hegel's Conscience: Radical Subjectivity and Rational Institutions
- Religious Zeal, Political Faction and the Corruption of Morals: Adam Smith and the Limits of Enlightenment
- This Distracted Globe: Hamlet and the Misgivings of Early Modern Memory
- Teaching the Contemplative Life: The Psychagogical Role of the Language of Theoria in Plato and Aristotle
- The Allegory of the Island: Solitude, Isolation, and Individualism in the Writings of Jean Jacques Rousseau
- The Convergence of Homer's Odyssey and Joyce's Ulysses
- The Curiosity of the Idle Reader: Self Consciousness in Renaissance Epic
- Bacon on Virtue: The Moral Philosophy of Nature's Conqueror
- Picturing the Path: The Visual Rhetoric of Barabudur
- Collecting Objects/Excluding People: Chinese Subjects and the American Art Discourse 1870-1900
- From Religionskrieg to Religionsgesprach: The Theological Path of Boden's Colloquium Heptaplomeres
- The Problem of Autonomy in the Thought of Montaigne
- The Virtue of the Soul and the Limits of Human Wisdom: The Search for *SÔPHROSUNÊ* in Plato's *Charmides*
- Nietzsche's "Fantastic Commentary": On the Problem of Self-Knowledge
- Erotic Uncertainty: Towards a Poetic Psychology of Literary Creativity
- Cruelty: On the Limits of Humanity
- Hamletian Romanticism: Social Critique and Literary Performance from Wordsworth to Trollope
- Hamlet's Arab Journey: Adventures in Political Culture and Drama 1952-2002
- Acquiring "Feelings that do not Err": Moral Deliberation and the Sympathetic Point of View in the Ethics of Dai Zhen
- The Contest of Regimes and the Problem of Justice: Political Lessons from Aristotle's Politics

- Socrates and the Second Person: The Craft of Platonic Dialogue
- In the Grip of the Future: The Tragic Experience of Time
- Thucydides on the Political Soul: Pericles, Love of Glory, and Freedom
- · Connecting Agency and Morality in Kant's Moral Theory
- Tocqueville and the Question of the Nation
- Pierre Bayle's "Machiavellianism"
- The Burial of Hektor: The Emergence of the Spiritual World of the Polis in the Iliad
- Hegel's Defense of Moral Responsibility
- · Dostoevsky, Madness, and Religious Fervor: Reason and its Adversaries
- The Uses of Boredom
- Two Loves, Two Cities: Intellectus and Voluntas in Augustine's Political Thought
- Power and Goodness: Leibniz, Locke and Modern Philosophy
- Soren Kierkegaard and the Very Idea of Advance Beyond Socrates
- Between City and Empire: Political Ambition and Political Form in Plutarch's Parallel Lives
- Gluttony and Philosophical Moderation in Plato's Republic
- Plato's Immoralists and their Attachment to Justice: A Look at Thrasymachus and Callicles
- The Great Law of Change: Edmund Burke, Thomas Paine, and the Meaning of the Past in a Democratic Age
- Devil's Advocate: Politics and Morality in the Work of Carl Schmitt
- Relation without Relation: Emily Dickinson Maurice Blanchot
- Perfecting Adam: The Perils of Innocence in the Modern Novel
- Stubborn Against the Fact: Literary Ideals, Philosophy and Criticism
- One Man Show: Poiesis and Genesis in the Iliad and Odyssey
- Political Theology in Eric Voegelin's Philosophy of History
- The Ancient Quarrel Unsettled: Plato and the Erotics of Tragic Poetry
- Heroic Action and Erotic Desire in Sidney, Spenser, and Shakespeare
- Dostoevsky and Suicide: A Study of the Major Characters
- The Aesthetics of Ambivalence Pirandello, Schopenhauer, and the Transformation of the European Social Imaginary
- Desire and Democracy Spinoza and the Politics of Affect
- The Multiplicity of Scripture The Confluence of Textual Traditions in the Making of the Antwerp Polyglot Bible (1568-1573)
- Intelligence Incarnate: The Logic of Recognition in Hegel's Phenomenology of Spirit
- King Lear and its Folktale Analogues
- Can There be Philosopher-Kings in a Liberal Polity? A Reinterpretation and Reappropriation of the Ideal Theory in Plato's Republic

# AREAS OF STUDY

Work with the Committee is not limited as to subject matter. Any serious program of study, based on the Fundamentals Examination, culminating in a scholarly doctoral dissertation, and requiring a framework wider than that of a specialized department, may be appropriate. In practice, however, the Committee is unwilling to accept a student for whom it is unable to provide competent guidance in some special field of interest, either from its own ranks or with the help of other members of the University.

# **ADMISSION**

Students in the Committee have unusual scope for independent study, which means that successful work in Social Thought requires mature judgment and considerable individual initiative. Naturally, the Committee wishes to be reasonably confident of an entering student's ability to make the most of the opportunities the Committee offers and to complete the program of study. Hence, we request that the personal statement required by the University application should take the form of a letter to the Committee which addresses the following questions: What intellectual interests, concerns, and aspirations lead you to undertake further study and why do you want to pursue them with the Committee? What kind of work do you propose to do here? (If you can, include your intentions for the Fundamentals requirement, further language study, and dissertation research.) How has your education to date prepared you? In addition, you should include a sample of your best written work, preferably relevant to the kind of work you propose to do at the Committee, though you may also include a short sample of fiction or poetry in addition. Should we consider the evidence submitted to be insufficient, we may ask you to add to it. Applicants are also required to take the Graduate Record Examination.

#### HOW TO APPLY

The application process for admission and financial aid for all Social Sciences graduate programs is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online at: https://applyssd.uchicago.edu/apply/.

Questions pertaining to admissions and aid should be directed to admissions@ssd.uchicago.edu or (773) 702-8415. Most material for the application can be uploaded into the application system. Additional correspondence and materials sent in support of applications should be mailed to:

The University of Chicago Division of the Social Sciences Admissions Office, Foster 105 1130 East 59th Street Chicago, IL 60637 Foreign students must provide evidence of English proficiency by submitting scores from either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS).

For additional information about the Social Thought program, please call 773-702-8410.

# COURSES

The department website offers descriptions of graduate courses scheduled for the current academic year: http://socialthought.uchicago.edu/page/socialthought-courses-descriptions. Or you may email the Committee directly com-soctht@uchicago.edu and request a copy of the current course schedule.

#### SOCIAL THOUGHT COURSES

# SCTH 30002. Performance as Subversion under Totalitarian Censorship. 100 Units.

This course explores theater, music, and film as forms of subversion during periods of militaristic and totalitarian dictatorships where strict censorship was applied to public performance. Students choose topics and submit a final paper after a class presentation.

Instructor(s): D. Buch Terms Offered: Winter

Equivalent Course(s): TAPS 29104

#### SCTH 31710. Machiavelli: The Prince and Discourses. 100 Units.

This course is a reading and discussion of *The Prince* and the *Discourses on Livy*, supplemented by portions of Livy's *History of Rome*. Themes include the roles of princes, peoples, and elites; the merits of republics and principalities; the political roles of pagan and Christian religion and morality; war and empire; founding and reform; virtue, corruption, and fortune; the relevance of ancient history to modern experience; reading and writing; and theory and practice.(A)

Instructor(s): N. Tarcov Terms Offered: Autumn

Equivalent Course(s): FNDL 29300,PLSC 32100,LLSO 21710,PLSC 20800

# SCTH 31770. Plato's REPUBLIC. 100 Units.

This course is devoted to reading and discussion of Plato's *Republic* and some secondary work with attention to justice in the city and the soul, war and warriors, education, theology, poetry, gender, eros, and actually existing cities.

Instructor(s): Nathan Tarcov Terms Offered: Winter 2013

Prerequisite(s): Undergrad course by consent Equivalent Course(s): PLSC 43820,FNDL 29503

# SCTH 31920. The Historical Context of the Platonic Dialogue. 100 Units.

Plato's historical fictions, like most such work, use the past as a way of confronting with current issues. This course will place them in the context of the history of philosophy and the development of prose literature, at a time when colloquial prose was new and philosophy was a highly contested term, overlapping with religion. Final paper.

Instructor(s): J. Redfield Terms Offered: Winter 2013 Note(s): 0pen to undergrads with consent of instructor Equivalent Course(s): CLAS 34812,CLCV 24812

# SCTH 35703. Unhappiness. 100 Units.

"Nothing is funnier than unhappiness" says Nelly in Beckett's *Endgame*. We shall seek to distinguish between unhappiness, as the subject of poetic works, from unhappiness as it is understood by philosophy, which, I would argue, is precisely as funny as nothing. We shall discuss some famous unhappy families. A Greek tragedy (Sophocles: *Oedipus Tyrannus*), a Renaissance tragedy (Shakespeare, *Hamlet*), a modern theater of the absurd (Beckett: *Endgame*).

Instructor(s): I. Kimhi Terms Offered: Spring

Equivalent Course(s): PHIL 21402,PHIL 31402,SCTH 25703

# SCTH 35901. Sophocles, Oedipus at Colonus. 100 Units.

A close literary and philological analysis of one of the most extraordinary of all Greek tragedies. While this play, in its many dimensions, will offer more than adequate material for classroom analysis and discussion, some attention will also be directed to its reception.

Instructor(s): G. Most Terms Offered: Winter 2013 Prerequisite(s): Greek or consent of instructor Equivalent Course(s): GREK 40112,CMLT 35903

#### SCTH 35902. Virgil, The Aeneid. 100 Units.

A close literary analysis of one of the most celebrated works of European literature. While the text, in its many dimensions, will offer more than adequate material for classroom analysis and discussion, attention will also be directed to the extraordinary reception of this epic, from Virgil's times to ours.

Instructor(s): G. Most Terms Offered: Winter 2013

Prerequisite(s): Latin helpful

Equivalent Course(s): CLAS 44512, ENGL 35902, CMLT 35902

#### SCTH 35914. Early Novels: The Ethiopian Story, Parzifal, Old Arcadia. 100 Units.

The course will introduce the students to the oldest sub-genres of the novel, the idealist story, the chivalric tale and the pastoral. It will emphasize the originality of these forms and discuss their interaction with the Spanish, French, and English novel.

Instructor(s): T. Pavel, G. Most Terms Offered: Winter

Equivalent Course(s): CMLT 34402,RLLT 24402,RLLT 34402,CMLT 24402

# SCTH 39126. Empire and Enlightenment. 100 Units.

The European Enlightenment was a formative period in the development of modern historiography. It was also an age in which the expansionist impulse of European monarchies came under intense philosophical scrutiny on moral, religious, cultural, and economic grounds. We chart a course through these debates by focusing in the first instance on histories of Rome by William Robertson and Edward Gibbon, as well as writing on law and historical method by Giambattista Vico. Instructor(s): Ralph Lerner and Clifford Ando Terms Offered: Winter 2013 Equivalent Course(s): CLCV 25107, CLAS 35107, HIST 30502, HIST 20502

SCTH 40106. Secularization & Resacralization of the Work of Art. 100 Units.

For course description contact Art History.

Equivalent Course(s): ARTH 46309

#### SCTH 40701. Many Ramayanas. 100 Units.

This course is a close reading of the great Hindu Epic, the story of Rama's recovery of his wife, Sita, from the demon Ravana on the island of Lanka, with special attention to the changes in the telling of the story throughout Indian history. Readings are in Paula Richman, Many Ramayanas and Questioning Ramayanas; the Ramayanas of Valmiki (in translation by Goldman, Sattar, Shastri, and R. K. Narayan), Kampan, and Tulsi; the Yogavasistha-Maharamayana; and contemporary comic books and films.

Instructor(s): W. Doniger Terms Offered: Winter

Prerequisite(s): Consent of instructor

Equivalent Course(s): HREL 42501,FNDL 22901,RLST 26801,SALC 42501

#### SCTH 44912. German Classical-Romantic Aesthetics I. 100 Units.

This seminar will treat crucial texts in the so-called "classical" tradition of aesthetic theory in Germany. Authors treated will be Winckelmann, Herder, Goethe, Schiller. The seminar will center on the close reading of works by these authors, including essays on Greek sculpture by Winckelmann, Herder's essay on sculpture, selections from Kant's Critique of the Power of Judgment, Goethe's essays on the Laocoon statue, his introduction to the Propyläen, Schiller's Letters on Aesthetic Education, as well as selected works of secondary literature. Central topics: a) the concept of form; b) aesthetic experience and freedom; c) natural and artistic beauty; d) the paradigmatic status of Greek art; e) the autonomy of art. Texts will be available in English and German. Discussion in English.

Instructor(s): D. Wellbery Terms Offered: Winter Equivalent Course(s): CMLT 46114,GRMN 46114

#### SCTH 44913. German Classical-Romantic Aesthetics II. 100 Units.

This seminar will treat crucial texts in the "romantic" tradition of aesthetic theory in Germany. Authors treated will be Friedrich and August Wilhelm Schlegel, Novalis, Schelling, and Hegel. The centerpiece of the seminar will be the study of Schelling's Philosophy of Art. We will also examine portions of Hegel's Lectures on Aesthetics. Important contributions to the scholarship on romanticism (broadly conceived) will also be considered. Central topics will be: a) the historicity of art; b) the systematic unity of the arts; c) irony. Texts will be available in English and German. Discussion in English.

Instructor(s): D. Wellbery Terms Offered: Spring Equivalent Course(s): CMLT 46214,GRMN 46214

#### SCTH 50087. Max Weber's Sociology of Religion. 100 Units.

Max Weber is perhaps the one undisputed classical figure in the discipline of sociology today. His reputation is to a large extent based on his historical and comparative studies of the "economic ethics" of the world religions and on the formulation of a systematic approach for the historical-sociological study of religion (in the relevant chapter of his "Economy and Society"). The seminar will start with a close reading of the religion chapter in "Economy and Society" and then continue with selections from his comparative studies. The focus of interest will not only be on Weber's theory, but also on the present state of research on the questions Weber was dealing with.

Instructor(s): H. Joas Terms Offered: Not offered 2013-14 Equivalent Course(s): SOCI 50087, AASR 50087

#### SCTH 50200. Seminar: George Herbert Mead. 100 Units.

While George Herbert Mead's work has been a continual inspiration for sociology and social psychology in the last decades, it has not been appreciated in its full extension. The sociological reception has ignored large parts of Mead's philosophical writings; in philosophy Mead is counted among the most important pragmatists, but the revival of interest in pragmatist philosophy has hardly led to new interpretations of his work. This is particularly regrettable since there is considerable potential in his writings for contemporary questions in moral philosophy, the study of temporality, etc. The seminar starts with a close reading of Mead's best-known book *Mind*, *Self*, *and Society*. Since this book is based on notes taken in his classes, we will then continue with some of Mead's essays and selections from his other books. We should reserve some time for discussion about the relationship between Mead and contemporary social thought. Required reading: G. H. Mead, *Mind*, *Self*, and *Society*. University of Chicago Press 1934 (and many later editions); Hans Joas, G. H. Mead. A Contemporary Re-examination of his Thought. MIT Press 1985 and 1997 (second edition).

Instructor(s): H. Joas Terms Offered: Not offered 2013-14

# SCTH 50601. Hegel's Science of Logic. 100 Units.

Hegel's chief theoretical work is called The Science of Logic. An abridged version is the first part of the various versions of his Encyclopedia of the Philosophical Sciences. We shall read and discuss representative passages from both versions, and attempt to understand Hegel's theory of concepts, judgment, and inference, and the place or role of such an account in his overall philosophical position. Several contemporary interpretations of these issues will also be considered. (V) Instructor(s): R. Pippin Terms Offered: Winter

Prerequisite(s): Prior work in Kant's theoretical philosophy is a prerequisite.

Equivalent Course(s): PHIL 50601

## SCTH 51114. Acting and Thinking. 100 Units.

An action, according to Aristotle, can be a logical conclusion of thinking. We shall try to understand this claim by reading book 7 of *Nicomachean Ethics* (we shall discuss Aristotle on practical syllogism, the weakness of the will, the difference between practical and theoretical). We shall proceed to consider the place of these ideas in Kant's *First and Second Critique*. We shall look at commentaries on the relevant texts by E. Anscombe, J. Dancy, S. Engstrom, J. McDowell, A.W. Price, S. Rodl, and others.

Instructor(s): I. Kimhi

Equivalent Course(s): PHIL 51303

SCTH 51400. Arabesque Narrative: A Hybrid Form of the Imaginary. 100 Units. For course description contact CDIN Center for Disciplinary Innovation. Equivalent Course(s): CDIN 51400, ARTH 46210, GRMN 51400



# DEPARTMENT OF SOCIOLOGY

#### Chair

• Elisabeth S. Clemens

#### **Professors**

- · Andrew Abbott
- Gary S. Becker, Economics
- · Terry N. Clark
- · Elisabeth S. Clemens
- · Andreas Glaeser
- · Karin Knorr Cetina, Anthropology
- Edward O. Laumann
- John Levi Martin
- Stephen W. Raudenbush
- Mario Luis Small
- Ross M. Stolzenberg
- Richard P. Taub, Comparative Human Development
- Linda Waite
- Kazuo Yamaguchi
- Dingxin Zhao

**Associate Professors** 

- Kathleen A. Cagney, Health Studies
- James A. Evans
- · Cheol-Sung Lee
- Omar M. McRoberts

**Assistant Professors** 

- Marco Garrido
- Kristen Schilt
- Forrest Stuart

Visiting Professor

- James Davis
- Hans Joas, Social Thought Emeritus Faculty
- Charles E. Bidwell
- Donald J. Bogue
- Donald N. Levine
- William L. Parish
- · Martin Riesbrodt
- · Gerald D. Suttles

# Associated Faculty

- Ronald S. Burt, Business
- Bernard E. Harcourt, Law School, Political Science
- Susan E. Mayer, Public Policy
- John Padgett, Political Science
- Dan Slater, Political Science

The Department of Sociology, established in 1893 by Albion Small and Charles A. Henderson, has been centrally involved in the history and development of the discipline in the United States. The traditions of the Chicago School were built by pioneers such as W. I. Thomas, Robert E. Park, Ernest W. Burgess, and William F.Ogburn. It is a tradition based on the interaction of sociological theory with systematic observation and the analysis of empirical data; it is interdisciplinary, drawing on theory and research from other fields in the social sciences and the humanities; it is a tradition which seeks to fuse together concern with the persistent issues of social theory and attention to the pressing social and policy problems of modern society.

Continuous developments in social research have marked the department's work in recent years. The department has pursued a balance in effort between individual scholarship and the development of group research approaches. Faculty members have been engaged in the development of systematic techniques of data collection and in the statistical and mathematical analysis of social data. Field studies and participant observation have been refined and extended. There has been an increased attention to macrosociology, to historical sociology, and to comparative studies. The staff is engaged in individual and large scale group projects which permit graduate students to engage in research almost from the beginning of their graduate careers. The student develops an apprenticeship relation with faculty members in which the student assumes increasing amounts of independence as he or she matures.

# RESEARCH

The study of sociology at the University of Chicago is greatly enhanced by the presence of numerous research enterprises engaged in specialized research. Students often work in these centers pursuing collection and study of data with faculty and other center researchers. Students have the opportunity for experience in the following research enterprises: the Ogburn-Stouffer Center for the Study of Social Organizations; the Population Research Center; the Committee on Demographic Training; NORC Research Centers; the Center for the Study of Gender and Sexuality; the Center for the Study of Race, Culture, and Politics; the Chicago Center for Contemporary Theory; the University of Chicago Urban Network; the Center for Health Administration Studies; the Rational Choice Program; and the Center on Demography and Economics of Aging. These provide an opportunity either for field work by which the student brings new primary data into existence or for the treatment of existing statistical and other data. The city of Chicago provides opportunities for a variety of field investigations, and the department also encourages cross national and foreign studies.

The Social Sciences has a strong tradition of comparative and international research, with area studies centers focused on East Asia, South Asia, the Middle East, Latin America, and Eastern Europe and Russia. In addition, graduate students may benefit from activities at the University of Chicago centers in Paris and Beijing as well as the deep roster of language training opportunities available on campus. There are equally diverse training opportunities and infrastructure to support quantitative research including the Survey Laboratory, the training program in Demography, course offerings in Statistics and a number of professional schools as well as a growing interdisciplinary community in computational research methods.

## ADMISSION

The Department of Sociology offers a program of studies leading to the Ph.D. degree. It does not have a master's degree program (students interested in a one-year master's program should consider the Divisional Master of Arts Program in the Social Sciences or MAPSS). Students ordinarily earn a master's degree as part of the Ph.D. program upon successful completion of the first year of coursework and the preliminary examination. The department welcomes students who have done their undergraduate work in other social sciences and in fields such as mathematics, biological sciences, and the humanities. The department also encourages students who have had work experience, governmental or military service, or community and business experience to apply.

All applicants for admission are required to submit Graduate Record Examination (GRE) General Test scores. Foreign students must provide evidence of English proficiency by submitting scores from either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS). A writing sample is required for all applications.

The application process for admission and financial aid for all Social Sciences graduate programs is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines, and department specific information is available online at https://applyssd.uchicago.edu/apply/.

Questions pertaining to admissions and aid should be directed to admissions@ssd.uchicago.edu or (773) 702-8415. Most materials in support of the application can be uploaded through the application. Other correspondence and materials sent in support of applications should be mailed to:

The University of Chicago Division of the Social Sciences Admission Office, Foster 105 1130 East 59th Street Chicago IL 60637

For additional information about the Sociology program, please see http://sociology.uchicago.edu/or call (773) 702-8677.

# THE DEGREE OF DOCTOR OF PHILOSOPHY

The doctoral program is designed to be completed in five to seven years of study by a student entering with a bachelor's degree. Satisfactory completion of the first phase of the Ph.D. program also fulfills the program requirements for the M.A. degree.

# COMMON CORE COURSE REQUIREMENTS

To complete the requirements for the M.A. And Ph.D. degrees, students are required to complete a set of required courses for credit in the first phase of the program. These include SOCI 30002 Principles of Sociological Research, and SOCI 30003 History of Social Theory. First-year students are required to register for SOCI 60020 1st-Year Colloquium: Research Questions and Design, a non-credit colloquium, in Autumn, Winter, and Spring.

# METHODOLOGY AND STATISTICS REQUIREMENT

For the Ph.D. degree, also during the first year, students are required to complete for credit SOCI 30004 Statistical Methods of Research and SOCI 30005 Statistical Methods of Research-2. For students entering with a strong quantitative background, the department may approve alternative sequences.

## Preliminary examination

This is an M.A. final/Ph.D. qualifying written examination designed to demonstrate competence in several major subdisciplines of sociology. The examination is based on the first-year common core courses, Sociological Inquiry 1 and History of Social Theory, and a special supplementary bibliography. The preliminary examination is normally taken at the beginning of the second year of residence. On the basis of the student's performance on this examination and in course work during the first year, the department determines whether the student is allowed to continue for the Ph.D.

# The qualifying paper

This paper should represent an original piece of scholarship or theoretical analysis and must be written in a format appropriate for submission to a professional publication. Note that the requirement is "publishable," not "published." The paper is to be prepared under the direct supervision and approval of a faculty member and may be written or revised in connection with one or more regular courses. Students entering with M.A. papers may submit an appropriate revision to meet the qualifying paper requirement. Students should formulate a proposal for the paper early in their second year. The qualifying paper should be completed by the first quarter of the third year of study.

#### SPECIAL FIELD EXAMINATIONS

Ph.D. students are required to demonstrate competence in two special fields. The Special Field Requirement is generally met during the second, third, and fourth years of graduate study. Students must pass the Preliminary Examination at the Ph.D. level before meeting the Special Field Requirement. An examination or review

essay is prepared on an individual basis in a field of sociology in which the student wishes to develop research competence. One special field is ordinarily closely related to the subject matter of the subsequent dissertation. The examination will cover both theoretical and substantive materials and the methods required for effective research in those fields. Preparation takes the form of specialized courses and seminars, supplemented by independent study and reading. The fields most commonly taken are community structure; demography; economics and work institutions; culture; educational institutions; family and socialization; formal organizations; mathematical sociology; methodology; modernization; political organization; race and ethnic relations; social change and social movements; social stratification; and urban sociology. One of the two Special Field requirements may be met with an approved sequence of methodology courses.

## DISSERTATION

The student prepares a research plan under the guidance of a designated faculty committee. The plan is subject to review by the faculty committee organized by each student to determine whether the project is feasible and to assist in the development of research. Upon approval of the dissertation proposal (by the first quarter of the fifth year of study) and completion of the other requirements listed above, the department recommends that the Division of the Social Sciences formally admit the student to candidacy for the Ph.D. degree. When the dissertation is completed, an oral examination is held on the dissertation and the field to which it is related. The Ph.D. dissertation is judged by its contribution to sociological knowledge and the evidence it shows of ability to carry out independent research.

# TEACHING OPPORTUNITIES

The Department of Sociology offers opportunities for campus teaching which give graduate students increasing responsibility for classroom instruction. After completing the second year of study, students may apply to the department to become course assistants with the opportunity to discuss course design, teach under supervision of a faculty member, and review student work. There are also many opportunities to teach in the social science courses included in the College Core Curriculum. Typically, students apply for positions as teaching interns in their 3rd or 4th year. Upon successful completion of an internship, graduate students are eligible for consideration as independent instructors of College level courses. Please note that many offers of admission and fellowship include a teaching requirement and that completion of a specified number of teaching appointments is a divisional requirement for the doctorate.

# GRADUATE WORKSHOPS

Students in sociology are invited to participate in the program of Graduate Workshops in the Humanities and Social Sciences, a series of interdepartmental discussion groups that bring faculty and advanced graduate students together to discuss their current work. At the workshops, Chicago faculty and students or invited guests present portions of books or other projects in which they are currently engaged. Workshops in which students and faculty in the department

participate include those addressed to the following topics: City, Society, and Space; Computational Social Science; Demography; East Asia: Politics, Economy, and Society; Education, Gender and Sexuality; History, Philosophy, and Sociology of Science; Money, Markets, and Consumption; Reproduction of Race and Racial Ideology; Semiotics: Culture in Context; and Social Theory and Evidence.

#### **SOCIOLOGY COURSES**

# SOCI 30002. Principles of Sociological Research. 100 Units.

Explores how theoretical questions and different types of evidence inform decisions about methodological approach and research design. For students entering the program before A2013, this course is required in the second year. For students entering in 2013-14 and after, the course is required in the first year.

Instructor(s): J. Martin Terms Offered: Winter

Prerequisite(s): Open only to 1st- and 2nd-year Sociology PhD students

#### SOCI 30003. History of Social Theory. 100 Units.

This course is a basic introduction to classical social theory. It considers Marx, Weber, Durkheim, and Simmel. Other authors are read as well.

Instructor(s): A. Glaeser Terms Offered: Spring

Note(s): Open only to 1st-year Sociology PhD students

#### SOCI 30004. Statistical Methods of Research. 100 Units.

This course provides a comprehensive introduction to widely used quantitative methods in sociology and related social sciences. Topics include analysis of variance and multiple regression, considered as they are used by practicing social scientists. Instructor(s): S. Raudenbush Terms Offered: Winter

Note(s): Students are expected to attend two lectures and one lab per week. UG Sociology majors and Sociology PhD students only. Others by consent of instructor Equivalent Course(s): SOCI 20004

#### SOCI 30005. Statistical Methods of Research-2, 100 Units.

The course covers logistic regression, time series analysis, and network analysis. Instructor(s): K. Yamaguchi Terms Offered: Spring

Prerequisite(s): SOCI 30004

Equivalent Course(s): CHDV 30005

#### SOCI 30101. Organizational Analysis. 100 Units.

This course is a systematic introduction to theoretical and empirical work on organizations broadly conceived (e.g., public and private economic organizations, governmental organizations, prisons, professional and voluntary associations, health-care organizations). Topics include intraorganizational questions about organizational goals and effectiveness, communication, authority, and decision making. Using recent developments in market, political economy, and neoinstitutional theories, we explore organizational change and interorganizational relationships for their implications in understanding social change in modern societies.

Instructor(s): E. Laumann Terms Offered: Autumn Equivalent Course(s): SOCI 20101,PBPL 23000

# SOCI 30102. Social Change. 100 Units.

This course presents a general overview of causal processes of macro-institutional level social changes. It considers a variety of types of cross-national, over-time changes such as economic growth, bureaucratization, revolutions, democratization, spread of cultural and institutional norms, deindustrialization, globalization and development of welfare states. It also covers various forms of planned changes in oppositional social movements (civil rights, environmental, women's, and labor movements).

Instructor(s): C. Lee, D. Zhao Terms Offered: Spring Equivalent Course(s): SOCI 20102

#### SOCI 30103. Social Stratification. 100 Units.

Social stratification is the unequal distribution of the goods that members of a society value (e.g., earnings, income, authority, political power, status, prestige). This course introduces various sociological perspectives about stratification. We look at major patterns of inequality throughout human history, how they vary across countries, how they are formed and maintained, how they come to be seen as legitimate and desirable, and how they affect the lives of individuals within a society. The readings incorporate classical theoretical statements, contemporary debates, and recent empirical evidence.

Instructor(s): R. Stolzenberg Terms Offered: Autumn Equivalent Course(s): SOCI 20103

#### SOCI 30104. Urban Structure and Process. 100 Units.

This course reviews competing theories of urban development, especially their ability to explain the changing nature of cities under the impact of advanced industrialism. Analysis includes a consideration of emerging metropolitan regions, the microstructure of local neighborhoods, and the limitations of the past U.S. experience as a way of developing worldwide urban policy.

Instructor(s): F. Stuart Terms Offered: Winter

Equivalent Course(s): SOCI 20104, CRES 20104, GEOG 22700, GEOG 32700, SOSC 25100

#### SOCI 30106. Political Sociology. 100 Units.

This course provides analytical perspectives on citizen preference theory, public choice, group theory, bureaucrats and state-centered theory, coalition theory, elite theories, and political culture. These competing analytical perspectives are assessed in considering middle-range theories and empirical studies on central themes of political sociology. Local, national, and cross-national analyses are explored.

Instructor(s): T. Clark Terms Offered: Spring

Prerequisite(s): Completion of the general education requirement in social sciences Equivalent Course(s): SOCI 20106, ENST 23500, PBPL 23600

# SOCI 30107. Sociology of Human Sexuality. 100 Units.

After briefly reviewing several biological and psychological approaches to human sexuality as points of comparison, this course explores the sociological perspective on sexual conduct and its associated beliefs and consequences for individuals and society. Substantive topics include gender relations; life-course perspectives on sexual conduct in youth, adolescence, and adulthood; social epidemiology of sexually transmitted infections (e.g., AIDS); sexual partner choice and turnover; and the incidence/prevalence of selected sexual practices.

Instructor(s): E. Laumann Terms Offered: Spring Prerequisite(s): Introductory social sciences course Equivalent Course(s): SOCI 20107, GNSE 27100

#### SOCI 30108. The Institution of Education, 100 Units.

This course is a general survey of the properties of education considered as an institution of historical and contemporary societies. Particular attention is given to institutional formation and change in education and to education's role in processes of social control and social stratification.

Instructor(s): C. Bidwell Terms Offered: Winter

Equivalent Course(s): SOCI 20108

# SOCI 30111. Survey Analysis I. 100 Units.

This course covers how to analyze and write up previously collected survey data: the basic logic of multivariate causal reasoning and its application to OLS regression. We emphasize practice in writing. This is not a course in sampling methods.

Instructor(s): J. Davis Terms Offered: Autumn

Equivalent Course(s): SOCI 20111

#### SOCI 30112. Applications of Hierarchical Linear Models. 100 Units.

A number of diverse methodological problems such as correlates of change, analysis of multi-level data, and certain aspects of meta-analysis share a common feature-a hierarchical structure. The hierarchical linear model offers a promising approach to analyzing data in these situations. This course will survey the methodological literature in this area, and demonstrate how the hierarchical linear model can be applied to a range of problems.

Instructor(s): S. Raudenbush Terms Offered: Spring

Prerequisite(s): Applied statistics at a level of multiple regression

#### SOCI 30116. Global-Local Politics. 100 Units.

Globalizing and local forces are generating a new politics in the United States and around the world. This course explores this new politics by mapping its emerging elements: the rise of social issues, ethno-religious and regional attachments, environmentalism, gender and life-style identity issues, new social movements, transformed political parties and organized groups, and new efforts to mobilize individual citizens.

Instructor(s): T. Clark Terms Offered: Winter

Equivalent Course(s): SOCI 20116, HMRT 20116, HMRT 30116, PBPL 27900

## SOCI 30118. Survey Research Overview. 100 Units.

The course provides an overview of interview-based data collection methods. Each student must develop a research question to guide their research design. Students get an overview of different interview-based data collection methods (focus groups, key-informant interviews, large-N sample surveys), how to sample and design a questionnaire or interview guide for their project, and the nuts and bolts of actual recruitment, receipt control and survey administration. The instructor provides feedback for proposed elements of each student's research plan through weekly assignments. The final paper is a research proposal that outlines a plan for research to address the student's research question.

Instructor(s): M. Van Haitsma Terms Offered: Autumn, Winter Equivalent Course(s): SOCI 20118, MAPS 30900, SOSC 20200, SOSC 30900, SSAD 53200

# SOCI 30120. Urban Policy Analysis. 100 Units.

This course addresses the explanations available for varying patterns of policies that cities provide in terms of expenditures and service delivery. Topics include theoretical approaches and policy options, migration as a policy option, group theory, citizen preference theory, incrementalism, economic base influences, and an integrated model. Also examined are the New York fiscal crisis and taxpayer revolts, measuring citizen preferences, service delivery, and productivity.

Instructor(s): T. Clark Terms Offered: Autumn Equivalent Course(s): SOCI 20120,PBPL 24800

#### SOCI 30122. Introduction to Population. 100 Units.

This course provides an introduction to the field of demography, which examines the growth and characteristics of human populations. It also provides an overview of our knowledge of three fundamental population processes: fertility, mortality, and migration. We cover marriage, cohabitation, marital disruption, aging, and population and environment. In each case we examine historical trends. We also discuss causes and consequences of recent trends in population growth, and the current demographic situation in developing and developed countries.

Instructor(s): L. Waite Terms Offered: Winter

# SOCI 30125. Rational Foundations of Social Theory. 100 Units.

This course introduces conceptual and analytical tools for the micro foundations of macro and intermediate-level social theories, taking as a basis the assumption of rational action. Those tools are then used to construct theories of power, social exchange, collective behavior, socialization, trust, norm, social decision making and justice, business organization, and family organization.

Instructor(s): K. Yamaguchi Terms Offered: Winter

Equivalent Course(s): SOCI 20125

# SOCI 30126. Japanese Society: Functional/Cultural Explanations. 100 Units.

The objective of this course is to provide an overview of social structural characteristics, and the functioning of contemporary Japanese society by a juxtaposition of universalistic functional (or rational) explanations and particularistic cultural (and historical) explanations. As will become clear as complementary to each other. Substantively, the course primarily focuses on 1) the forms of social interaction and structure, 2) work organization and family, and 3) education, social inequality and opportunity. The course also presents discussions of the extent to which Japan is "unique" among industrial societies. In covering a broad range of English-language literature on Japanese Society, the course not only presents reviews and discussions of various alternative theoretical explanations of the characteristics of Japanese society, but also a profound opportunity to critically review and study selected sociological theories.

Instructor(s): K. Yamaguchi Terms Offered: Spring

Equivalent Course(s): SOCI 20126

#### SOCI 30129. Economic Development in the Inner City. 100 Units.

This course will explore conceptually what the issues are around the economic position of cities in the early 21st century, and how to think creatively about strategies to generate economic growth that would have positive consequences for low-income residents. Community Development Corporations, empowerment zones, housing projects, and business development plans through credit and technical assistance will all be considered.

Instructor(s): R. Taub Terms Offered: Winter

Note(s): Not offered 2013-14

Equivalent Course(s): CHDV 20129, CHDV 30129

#### SOCI 30131. Social and Political Movements. 100 Units.

This course provides a general overview and a synthesis on theories of social and political movements. We emphasize the importance of state and state-society relations to the rise and outcome of a social or political movement.

Instructor(s): D. Zhao Terms Offered: Spring

#### SOCI 30157. Mathematical Models. 100 Units.

This course examines mathematical models and related analyses of social action, emphasizing a rational-choice perspective. About half the lectures focus on models of collective action, power, and exchange as developed by Coleman, Bonacich, Marsden, and Yamaguchi. Then the course examines models of choice over the life course, including rational and social choice models of marriage, births, friendship networks, occupations, and divorce. Both behavioral and analytical models are surveyed.

Instructor(s): K. Yamaguchi Terms Offered: Not offered 2013-14

Equivalent Course(s): SOCI 20157

# SOCI 30169. Global Society and Global Culture: Paradigms of Social and Cultural Analysis. 100 Units.

This course introduces students to major theories of globalization and to core approaches to global society and global culture. We discuss micro- and macroglobalization, cultural approaches to globalization, world systems theory, glocalization and hybridization approaches and the "strong program" in globalization studies. Empirically oriented topics include global love, global finance, global terrorism and the globalization of nothing. The empirical ethnographies of the global are chosen to illustrate the interest and feasibility of globalization studies and of critical studies of dimensions of globalization.

Instructor(s): K. Knorr Cetina Terms Offered: Autumn Equivalent Course(s): SOCI 20169, ANTH 25710, ANTH 35710

Equivalent Course(s). 50 cr 20107,711 v111 257 10,711 v111 50

# SOCI 30179. Labor Force and Employment. 100 Units.

This course introduces key concepts, methods, and sources of information for understanding the structure of work and the organization of workers in the United States and other industrialized nations. We survey social science approaches to answering key questions about work and employment, including: What is the labor force? What determines the supply of workers? How is work organized into jobs, occupations, careers, and industries? What, if anything, happened to unions? How much money do workers earn and why? What is the effect of work on health? How do workers and employers find each other? Who is unemployed? What are the employment effects of race, gender, ethnicity, and religion?

Instructor(s): R. Stolzenberg Terms Offered: Autumn

Equivalent Course(s): SOCI 20179

# SOCI 30184. Political Culture, Social Capital, and the Arts. 100 Units.

New work finds that certain arts and cultural activities are rising, especially among the young, in many countries. This course reviews core related concepts (e.g., political culture, social capital, legitimacy) and how they change with these new developments. Scenes, nightlife, design, the Internet, and entertainment emerge as critical drivers of the post-industrial/knowledge society. Older primordial conflicts over class, race, and gender are transformed with these new issues, which spark new social movements and political tensions. After a focus on the discussion of readings, the second part of the course is conducted as a seminar.

Instructor(s): T. Clark Terms Offered: Not offered 2013-14

# SOCI 30191. Social Change in the United States. 100 Units.

This course provides students with concepts, facts, and methods for understanding the social structure of the contemporary United States, recent changes in the U.S. social structure, survey data for measuring social structure and social change in contemporary industrial societies, and data analysis methods for distinguishing different types of change. This course is taught by traditional and nontraditional methods: traditional by a combination of readings, lectures, and discussions; and nontraditional by in-class, "live" statistical analysis of the cumulative file (1972–2004) of the NORC General Social Surveys (GSS).

Instructor(s): R. Stolzenberg Terms Offered: Not offered 2013-2014 Prerequisite(s): Two prior sociology courses or consent of instructor Equivalent Course(s): SOCI 20191

# SOCI 30192. The Effects of Schooling. 100 Units.

From at least the Renaissance until some time around the middle of the twentieth century, social class was the pre-eminent, generalized determinant of life chances in European and, eventually, American societies. Social class had great effect on one's social standing; economic well-being; political power; access to knowledge; and even longevity, health, and height. In that time, there was hardly an aspect of life that was not profoundly influenced by social class. In the ensuing period, the effects of social class have receded greatly, and perhaps have even vanished. In their place formal schooling has become the great generalized influence over who gets access to the desiderata of social life, including food, shelter, political power, and medical care. So it is that schooling is sociologically interesting for reasons that go well beyond education. The purpose of this course is to review what is known about the long-term effects of schooling.

Instructor(s): R. Stolzenberg Terms Offered: Winter

Equivalent Course(s): SOCI 20192

# SOCI 30203. Emotions and Culture, Paradigms of Empirical and Theoretical Analysis. 100 Units.

The sociology of emotions is of increasing interest to contemporary societies. We believe now that even intelligence is dependent on emotions, and we find, in a variety of settings, that emotions and emotional energy directly influence situational and organization outcomes. The course gives an overview of the current state of the analysis of emotions in social science fields. Students will be asked to read, analyze, and discuss major works in the social studies of emotions in class, and to think about ways to apply emotional concepts in future research. Particular attention will go to analyzing the challenges for theorization and empirical specification.

Instructor(s): K. Knorr Cetina Terms Offered: Winter

Equivalent Course(s): SOCI 20203, ANTH 25125, ANTH 35125

# SOCI 30204. Sociology of Civil Society. 100 Units.

This course examines how civil society interacts with the state and market. After a theoretical overview of classical theories of civil society and more modern theoretical variations, it explores the various topics of civil society from institutional, organizational, and cultural perspectives. Topics include: civil society and social movements, civil society and welfare states, civil society and identity politics, civil society and market, and transformation of civil society and public sphere. Instructor(s): C. Lee Terms Offered: Not offered 2013-14

Equivalent Course(s): SOCI 20204

SOCI 30207. Social and Cultural Organization of Non-Human Animals. 100 Units.

In the past few decades, there has been an explosion of rigorous work in ethology regarding social organization, cultural patterns, and cognition in non-human animals. The results have fundamentally overturned previous assumptions about animals; they also challenge and inspire sociological theory to encompass formations observed in non-humans. This course builds on classic theoretical approaches (of Chicago sociology and philosophy, of evolutionary theorists) and the examines the current state of knowledge about animal social organization, communication, and culture. Although there is a fair amount on primates, we will be examining work on a number of social species from ants to whales. Students will write a paper pursuing one theme of the course (e.g., social organization, learning) in one species (e.g., Ethiopian wolf, Octopus vulgaris).

Instructor(s): J. Martin Terms Offered: Not offered 2013-14

Equivalent Course(s): SOCI 20207

## SOCI 30217. Introduction to Science and Technology Studies. 100 Units.

Science, technology and information are the 'racing heart' of contemporary cognitive capitalism and the engine of change of our technological culture. They are deeply relevant to the understanding of contemporary societies. But how are we to understand the highly esoteric cultures and practices of science, technology and information? During the twentieth century, sociologists, historians, philosophers, and anthropologists raised original, interesting, and consequential questions about the sciences and technology. Often their work drew on and responded to each other, and, taken together, their various approaches came to constitute a field, "science and technology studies." The course furnishes an initial guide to this field. Students will not only encounter some of its principal concepts, approaches, and findings, but will also get a chance to apply science-studies perspectives themselves by performing a fieldwork project. Among the topics we examine are the sociology of scientific knowledge and its applications, constructivism and actor network theory, the study of technology and information, as well as recent work on knowledge and technology in the economy and finance. Beginning with the second week of classes, we will devote the second half of the class to presentations and discussion.

Instructor(s): K. Knorr Cetina Terms Offered: Not offered 2013-14 Equivalent Course(s): ANTH 32410,CHSS 30217,ANTH 22410,SOCI 20217

# SOCI 30218. The Future of Knowledge. 100 Units.

This course will investigate various aspects of knowledge and its future. Topics to be considered will include amateur knowledge, economics of knowledge, changes in knowledge production and control practices, trends in education, and changes in habits of knowledge. Course format will be a seminar organized around individual research projects in the course area.

Instructor(s): A. Abbott Terms Offered: Not offered 2013-14

Prerequisite(s): One course in sociological theory

Equivalent Course(s): SOCI 20218

# SOCI 30219. Urban Ethnography. 100 Units.

The everyday experiences and cultural contours of urban life have long been a focal point for sociological study. Through weekly readings and discussion of influential texts, this course surveys the development of urban ethnography from the First Chicago School of the early twentieth century through current-day research. We will explore the substantive issues that have historically shaped urban life—from community dynamics to poverty to social control—as well as the epistemological and methodological concerns faced by those who study urban populations. The aim is to ground students in the foundational literature while preparing them to conduct their own urban ethnographies in the future.

Instructor(s): F. Stuart Terms Offered: Winter

Note(s): Third- and fourth-year undergraduates only

Equivalent Course(s): SOCI 20219

# SOCI 30223. Sociology of the Humanities. 100 Units.

This course considers the history as well as the social and cultural structures of the disciplines currently known as humanities: Modern Languages and Literatures, Music, Art History, Classics, and Philosophy. It gives a historical review of the disciplines as scholarly projects in both American and European universities. It also considers modes of knowing in the various fields and how they have changed, as well as the implications of academic professionalization and expansion for the humanities disciplines. Beyond the readings, the principal student obligation is a research project investigating in detail a topic mutually agreed upon by the professor and the student. The course follows a mixed lecture/discussion format. Instructor(s): A. Abbott Terms Offered: Autumn

Equivalent Course(s): SOCI 20223

# SOCI 30224. Topics in Sociology of Culture. 100 Units.

This class surveys the historical bases and current extension of core readings in the sociology of culture. These works will be investigated not only in their own terms, but their position in central issues revolving around the independence (or lack of same) of cultural production communities; the omnivore/unibrow question; the role of culture in larger (and smaller) political and social environments; the use of hierarchical as opposed to non-hierarchical models of social structure; and the location of meaning.

Instructor(s): T. Clark, J. Martin Terms Offered: Autumn

# SOCI 30302. Problems of Public Policy Implementation. 100 Units.

Once a governmental policy or program is established, there is the challenge of getting it carried out in ways intended by the policy makers. We explore how obstacles emerge because of problems of hierarchy, competing goals, and cultures of different groups. We then discuss how they may be overcome by groups, as well as by creators and by those responsible for implementing programs. We also look at varying responses of target populations.

Instructor(s): R. Taub Terms Offered: Autumn

Prerequisite(s): One prior 20000-level social sciences course

Note(s): PBPL 22100-22200-22300 may be taken in or out of sequence.

Equivalent Course(s): PBPL 22300,CHDV 30302

#### SOCI 30303. Urban Landscapes as Social Text. 100 Units.

This seminar explores the meanings found in varieties of urban landscapes, both in the context of individual elements and composite structures. These meanings are examined in relation to three fundamental approaches that can be identified in the analytical literature on landscapes: normative, historical, and communicative modes of conceptualization. Emphasis is placed on analyzing the explicitly visual features of the urban landscape. Students pursue research topics of their own choosing within the general framework.

Instructor(s): M. Conzen Terms Offered: Autumn

Prerequisite(s): Advanced standing and consent of instructor.

Equivalent Course(s): GEOG 42400

# SOCI 30306. HUMAN CAPITAL. 100 Units.

This course covers both micro and macro aspects of human capital: investments by parents in the education and other human capital of their children, intergenerational transmission of inequality, links between specializations in particular types of human capital and coordination costs, general knowledge, and the extent of the market. The relation between human capital, population change, and economic growth is also emphasized.

Instructor(s): Gary Becker Terms Offered: Spring

Equivalent Course(s): ECON 34300

# SOCI 30314. Urban Neighborhoods & Urban Schools: Community Economic Opportunity and the Schools. 100 Units.

This course explores the interplay between schools and neighborhoods and how this plays out in shaping life chances. (B; 2)

Instructor(s): M. Keels Terms Offered: Winter

Note(s): Not offered 2013-14

Equivalent Course(s): CHDV 20304, PUBL 29304

#### SOCI 40103. Event History Analysis. 100 Units.

An introduction to the methods of event history analysis will be given. The methods allow for the analysis of duration data. Non-parametric methods and parametric regression models are available to investigate the influence of covariates on the duration until a certain even occurs. Applications of these methods will be discussed i.e., duration until marriage, social mobility processes organizational mortality, firm tenure, etc.

Instructor(s): K. Yamaguchi Terms Offered: Not offered 2013-14

### SOCI 40109. Loglinear Analysis. 100 Units.

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Instructor(s): K. Yamaguchi Terms Offered: TBD

### SOCI 40112. Ethnographic Methods. 100 Units.

This course explores the epistemological and practical questions raised by ethnography as a method -- focusing on the relationships between theory and data, and between researcher and researched. Discussions are based on close readings of ethnographic texts, supplemented by occasional theoretical essays on ethnographic practices. Students also conduct original field research., share and critique each other's field notes on a weekly basis, and produce analytical papers based on their ethnographies.

Instructor(s): O. McRoberts Terms Offered: Spring

Note(s): Graduate students only

# SOCI 40133. Content Analysis. 100 Units.

Introduction to the analysis of textual content for social insight. Students in course will: 1) survey recent advances in natural language processing, information extraction and computational linguistics that can be leveraged to analyze textual content; 2) develop a computational toolkit that implements some of these advances; and 3) design and execute projects that analyze textual data for social inference. Specific topics include text clustering, classification, relevance ranking, and latent semantic indexing.

Instructor(s): J. Evans Terms Offered: Spring

Note(s): Advanced UGs by consent

## SOCI 40142. Library Methods for Social Sciences. 100 Units.

This course is a graduate introduction to the methods involved with "research with records" -- that is, material like manuscripts, books, journals, newspapers, ephemera, and government and institutional documents. (Such material has been typically printed but may now be stored electronically as well as physically.) The course covers the essentials of project design, bibliography, location, access, critical reading, source evaluation and provenance, knowledge categorization and assembly, and records maintenance. The course is a methodological practicum and will involve both small-scale exercises and a larger project. Major texts include Thomas Mann's Oxford Guide to Library Research and Booth, Colomb, and Williams, The Craft of Research.

Instructor(s): A. Abbott Terms Offered: Winter Note(s): Advanced undergrads by consent

# SOCI 40152. Survey Practicum: Qualitative Research for Questionnaire Design. 100 Units.

The survey practicum provides an opportunity for students to learn interviewing and questionnaire design methods with a real, hands-on project. The class is limited to 10 students to keep the team to a manageable size.

Instructor(s): M. van Haitsma Terms Offered: Not offered 2013-14

Prerequisite(s): Graduate students only

### SOCI 40156. Hermeneutic Sociology. 100 Units.

This class introduces students to the central ideas of hermeneutic social scholarship with its emphasis on analyzing the cultural and historical diversity and the dynamics of societies in terms of the ways in which people interpret the world. The issue which thus centers this class' is the historicity of interpretation as practice and its connection to actions and institutions. This course also offers a hands-on introduction to key hermeneutic analytics such as narrative, rhetoric, performance, iconology, voice, implied reader etc. Readings include selections from Vico, Herder, Dilthey, Panofsky, Wittgenstein, Burke, Goffman, Ricoeur, Derrida, Eco, Searle. Instructor(s): A. Glaeser Terms Offered: Spring

# SOCI 40164. Involved Interviewing: Strategies for Interviewing Hard to Penetrate Communities and Populations. 100 Units.

Imagine that you must interview someone who hails from a background unlike your own; perhaps you need to interview an incarcerated youth, or gather a life history from an ill person. Maybe your task is to conduct fieldwork inside a community that challenges your comfort level. How do we get others to talk to us? How do we get out of our own way and limited training to become fully and comfortably engaged in people and the communities in which they reside? This in-depth investigation into interviewing begins with an assumption that the researcher as interviewer is an integral part of the research process. We turn a critical eye on the interviewer's role in getting others to talk and learn strategies that encourage fertile interviews regardless of the situational context. Weekly reading assignments facilitate students' exploration of what the interview literature can teach us about involved interviewing. Additionally, we critically assess our role as interviewer and what that requires from us. Students participate in evaluating interview scenarios that are designed to explore our assumptions, sharpen our interviewing skills and troubleshoot sticky situations. We investigate a diversity of settings and populations as training ground for leading effective interviews. The final project includes: 1) a plan that demonstrates knowledge of how to design an effective interviewing strategy for unique field settings; 2) instructor's feedback on students' personal journals on the role of the interviewer.

Instructor(s): S. Hicks-Bartlett Terms Offered: Autumn

Prerequisite(s): Graduate students only

# SOCI 40168. Welfare States, Poverty, and Inequality. 100 Units.

This course gives an overview of the political economy of social policy in advanced industrial democracies. The course explores how organized social forces, partisan politics, business interests, international pressures, and demographic changes have shaped and transformed the welfare state regimes and how such processes have affected distributional outcomes in rich democracies and developing countries. Topics include: Theories of the Welfare State, Welfare State Regime Typology, Bargaining Regimes and Welfare Regimes, Development of American Welfare State, Post-industrial Economy and Welfare States, Globalization/Financial Crisis and Welfare States, Social Movements and Welfare States, Welfare States and Poverty, Welfare States and Income Inequality, Welfare States and Gender Inequality. Instructor(s): C.S. Lee Terms Offered: Not offered 2013-14

Prerequisite(s): Graduate students only

# SOCI 40172. Maverick Markets: Cultural Economy and Cultural Finance. 100 Units.

What are the cultural dimensions of economic and financial institutions and financial action? What social variables influence and shape 'real' markets and market activities? 'If you are so smart, why aren't you rich?' is a question economists have been asked in the past. Why isn't it easy to make money in financial areas even if one knows what economists know about markets, finance and the economy? And why, on the other hand, is it so easy to get rich for some participants? Perhaps the answer is that real markets are complex social and cultural institutions which are quite different from organizations, administrations and the production side of the economy. The course addresses these differences and core dimensions of economic sociology. This course provides an overview over social and cultural variables and patterns that play a role in economic behaviour and specifically in financial markets. We draw on the 'New Economic Sociology' which emerged in the late 70's and early 80's from the work of Harrison White, Marc Granovetter, Viviana Zelizer, Wayne Baker and others. We also draw on recent analysis of the relationship between knowledge, technology and economic and financial institutions and behaviour, and include an emerging body of literature on the financial crisis of 2008-09. The readings examine the historical and structural embeddedness of economic action and institutions, the different constructions and interpretations of money, prices and other dimensions of a market economy, and how a financial economy affects organizations, the art world and other areas.

Instructor(s): K. Knorr Cetina Terms Offered: Winter Note(s): Open to advanced undergraduates

Equivalent Course(s): ANTH 45405

#### SOCI 40173. Seminar on Social Stratification. 100 Units.

The goal of this advanced seminar is to identify, review, and critique selected historical and contemporary approaches to stratification and inequality. The emphasis will be on innovative theoretical perspectives, their relationship to classic traditions, and their insights into longstanding and emerging forms of inequality. Readings will be eclectic, spanning levels of analyses and sub-disciplinary borders. For example, we will explore current social psychological research on the emergence of power and prestige orders in small groups and occupational communities, contemporary studies linking the social organization of schools to inequality, and current research on the various forms of human, social and cultural capital in generating inequality.

Instructor(s): R. Stolzenberg Terms Offered: Winter

Prerequisite(s): Advanced UGs by consent

#### SOCI 40174. Researching Gender and Sexuality. 100 Units.

This course is an introduction to qualitative methods for researching gender & sexuality as well as a research practicum for students. The course is designed to aid graduate students and advanced undergraduates in developing a solid, executable research study focused on gender and sexuality. Over the ten-week course, students read exemplary articles and books showcasing a variety of qualitative research methodologies. Additionally, they read methodology articles that highlight the benefits and limitations of various methodologies and study designs. Students are required to identify a research question at the beginning of the course. They analyze existing research on this topic, and conduct a limited amount of their own primary research on the topic. The course assignments build toward the formation of a final project: a research proposal complete with a literature review, methods section, preliminary data section, and a research hypotheses section. At the end of the course, students will not only have a deeper understanding of methodological approaches to gender and sexuality research, but also will have gained experience in collecting data and designing a viable research proposal.

Instructor(s): K. Schilt Terms Offered: Autumn

Prerequisite(s): Consent of instructor Equivalent Course(s): GNDR 40170

# SOCI 40177. Coding and Analyzing Qualitative Data: Using Open-Source Computer Assisted Qualitative Data Analysis Software (CAQDAS) 100 Units.

This is a graduate level course in coding and analyzing qualitative data (e.g., interview transcripts, oral histories, focus groups, letters, and diaries, etc). In this hands-on-course students learn how to organize and manage text-based data in preparation for analysis and final report writing of small scale research projects. Students use their own laptop computers to access one of two free, open-source software programs available for Windows, Mac, and Linux operating systems. While students with extant interview data can use it for this course, those without existing data will be provided text to code and analyze. This course does not cover commercial CAQDAS, such as AtlasTi, NVivo, The Ethnograph or Hypertext.

Instructor(s): S. Hicks-Bartlett Terms Offered: Spring

Prerequisite(s): Graduate students only

# SOCI 40181. Social Organization. 100 Units.

This is an investigation into the forms that recurrently arise in human social organization—it is not a class in "organizations" like General Motors, the University of Chicago, and so on. We will investigate informal personal relations, kinship relations, political relations, and economic relations, and how they tend to be organized. Although we will not be placing great weight on particular theories of such organization, given the unruly mass of material, we will at times be using synthetic and/or synoptic sources that make theoretical arguments.

Instructor(s): J. Martin Terms Offered: Spring

Prerequisite(s): Grad students only, except with PQ of SOCI 20207

# SOCI 40182. Causal Analysis Based on the Use of Propensity Score and Standardization. 100 Units.

Statistical causal analysis has become central in social science research. The causal analysis is concerned with the method of obtaining an estimate of the average "treatment effect" of a categorical variable X on the dependent variable Y when the treatment effect meets the counterfactual definition of causality. The course also describes the modeling of heterogeneous treatment effects. This course covers (1) counterfactual definition of causality, missing-data mechanisms, and the distinction of the average treatment effect (AT) and the average treatment effect for the treated (ATT) and their relations with the idea of standardization; (2) propensity-score methods for cross-sectional data, including both inverse probability weighting methods and matching methods, based on the assumption of strong ignorability of treatment assignment; (3) semi-parametric logit and multinomial logit models based on a standardization method; (4) the inverse-probability weighting methods for panel data analysis including Robins' marginal structural models and Abadie's generalized DID method; and (5) methods of combining of the propensity-score methods with Heckman's method for handling selection bias due to unobserved confounders. Many applications for empirical data are introduced with practical guidance for applications.

Instructor(s): K. Yamaguchi Terms Offered: Not offered 2013-14

#### SOCI 40183. Do Ideas Evolve? 100 Units.

In the decades after Darwin, scholars from James to Simmel suggested that knowledge might evolve. The past 30 years have witnessed an explosion of related research, providing rigorous and empirically grounded theories of cultural and linguistic evolution. In this course, we will ask whether these insights extend to the world of ideas and knowledge. We begin by surveying key aspects of biological evolution. We then turn to cultural evolution, exploring issues like the units of selection and the mechanisms of cultural reproduction. We will spend the bulk of the course applying these insights to knowledge evolution. We will explore theories of innovation to assess where new ideas come from. We will investigate cognitive biases and heuristics to uncover regularities in the generation and selection of ideas. We will see how social context and economic incentives affect the "fitness" and fecundity of facts and theories. And we will develop an understanding of the interdependent "ecology" of ideas as constitutive of disciplinary formations. Where appropriate, we will introduce relevant empirical techniques. The course will be organized as a highly participatory seminar, focused on readings from diverse literatures. Students will also pursue projects of their own choosing in small groups. Instructor(s): J. Evans and J. Foster Terms Offered: Spring 2013

Equivalent Course(s): CHSS 43500,CDIN 43500

#### SOCI 40185. Teaching Practicum. 100 Units.

This course is a teaching practicum designed for Sociology PhD students in their third year and beyond. Students will design their own syllabi over the quarter. Each student will gain experience in teaching sociological concepts and providing feedback to their peers. This class is most useful to students with minimal teaching experience.

Instructor(s): K. Schilt Terms Offered: Not offered 2013-14

Prerequisite(s): Sociology PhD students only

#### SOCI 40186. Postsocial Society. 100 Units.

What do we mean by the notion "postsocial?" Which processes and developments feed into and sustain a postsocial world? Can these developments be related to a knowledge society, a global society and perhaps a postmodern and transhuman society? Do some of these tendencies affect our notions of agency, meaning, and identity? Issues such as the following are considered: relationships with non-human objects; the impact of technologies on social relations; transhuman arguments; neurosociological and neurophysiological research that has implications for the understanding of human agency and our notion of social action; and arguments that call for a redefinition of core concepts of sociology like that of the face-to-face situation. The course includes theoretical arguments as well as empirical research. Instructor(s): K. Knorr Cetina Terms Offered: Not offered 2013-14

Prerequisite(s): Open to advanced undergraduates

Equivalent Course(s): ANTH 43505

# SOCI 40187. Contemporary Social Theory. 100 Units.

This course is about how contemporary theorists and those interested in a theoretical sociology, anthropology or related fields think about societies, how they rearranges themselves, and how social and cultural forms and relations can be analyzed. It addresses connections that transcend national borders and connections that require us to dig deeper than the person and look at the brain. We address different theoretical traditions, including those attempting a diagnosis of our times, and mechanism theories. The overall focus is on defining and agenda setting paradigms in the second half of the 20th century and some new 21st century theorizing.

Instructor(s): K. Knorr Cetina Terms Offered: Autumn

# SOCI 40188. Advanced Methods in Survey Research. 100 Units.

This course focuses on the fundamentals of social survey design and implementation. The course begins with theory underlying instrument construction, then addresses internal and external validity, measurement validity, questionnaire construction, scaling and scoring, sampling methodology, and survey implementation. Throughout the course students learn about current data collection efforts at the University of Chicago.

Instructor(s): K. Cagney Terms Offered: Spring

# SOCI 50003. Sociology of the State. 100 Units.

Through taxation, regulation, redistribution, and the provision of services, modern states profoundly shape social life and constitute a principal form of political power. This seminar will survey major theories of the state, engaging with both comparative-historical questions (pre-modern state forms, the rise of nation-states, the development of welfare states and economic policy regimes) and contemporary challenges of governance. The course provides an overview of selected current research and an opportunity for those interested in political, historical, or macrocomparative sociology to develop empirical projects with the state as an important dimension of analysis.

Instructor(s): E. Clemens Terms Offered: Winter

#### SOCI 50017. Urban Field Research. 100 Units.

This course focuses on methods for collecting qualitative field data in urban settings from the ground up, so to speak, and to discuss some related methodological issues. In addition to readings, there are field assignments and students discuss each other's notes. (M)

Instructor(s): R. Taub Terms Offered: Spring 2014

Prerequisite(s): Graduate students only.

Note(s): Offered every other year. Equivalent Course(s): CHDV 45700

# SOCI 50022. Seminar: George Herbert Mead. 100 Units.

While George Herbert Mead's work has been a continual inspiration for sociology and social psychology in the last decades, it has not been appreciated in its full extension. The sociological reception has ignored large parts of Mead's philosophical writings; in philosophy Mead is counted among the most important pragmatists, but the revival of interest in pragmatist philosophy has hardly led to new interpretations of his work. This is particularly regrettable since there is considerable potential in his writings for contemporary questions in moral philosophy, the study of temporality, etc. The seminar starts with a close reading of Mead's best-known book *Mind*, *Self*, *and Society*. Since this book is based on notes taken in his classes, we will then continue with some of Mead's essays and selections from his other books. We should reserve some time for discussion about the relationship between Mead and contemporary social thought. Required reading: G. H. Mead, *Mind*, *Self*, and *Society*. University of Chicago Press 1934 (and many later editions); Hans Joas, G. H. Mead. A Contemporary Re-examination of his Thought. MIT Press 1985 and 1997 (second edition).

Instructor(s): H. Joas Terms Offered: Not offered 2013-14

Equivalent Course(s): SCTH 50200

#### SOCI 50047. Seminar: Institutional Analysis. 100 Units.

Institutional theories address the relatively durable configurations and conventions that shape political and social processes. Within societies, over time, and across nations, institutional analysis has sought to explain convergence across cases and persistence over time as well as those episodes of institutional change when organizational fields and political orders are significantly transformed. The course will include readings by sociologists, political scientists and institutional economists. Instructor(s): E. Clemens Terms Offered: Not offered 2013-14

# SOCI 50066. Seminar: Contested Sexualities. 100 Units.

This course examines the study of sexualities within the field of sociology, both historically and today. We will analyze the strengths and weaknesses of various methodological approaches, including survey research, ethnographic community studies, and participant observation research. Additionally, we will discuss the theoretical implications of sexualities research and how they relate to broader sociological concepts. Finally, we will explore how sociological research can contribute to broader public discussions about the origins of sexual identity, and sexual diversity rights.

Instructor(s): K. Schilt Terms Offered: Not offered 2013-14

Equivalent Course(s): GNDR 50600

# SOCI 50068. Logic of Inquiry in Case Study Methods. 100 Units.

This seminar covers basic techniques for interpreting and analyzing case study data, whether ethnographic or historical. Our objective is to think more clearly and logically about case study methods. The seminar will tackle head-on important questions facing case study methods in sociology today: Is case study research, whether ethnographic or historical, scientific? By what criteria does it meet or fail to meet the standards of scientific evidence? Does this matter? What are the roles of induction and deduction in qualitative research? Do case studies effectively verify hypotheses, or only generate them? Do case studies have a small-n problem? Is such work generalizable? Are Mill's comparative methods appropriate for social scientists? Students must have taken at least two courses in graduate-level statistics or quantitative social science analysis.

Instructor(s): M. Small Terms Offered: Winter

Prerequisite(s): PQ: two courses in grad-level stats or quant social science analysis Note(s): Graduate students only

## SOCI 50076. Logic of Social Science Inquiry. 100 Units.

Largely drawing on the literature of social movement, revolution, and historical sociology, this seminar surveys the methodologies that social scientists use to construct stories for the cases that interest them, including deductive reasoning, simulation, correlative thinking, mechanism-based analysis, case-based comparison, historical method, dialectics, conceptualization, hermeneutics, and more. The course discusses the pros and cons of each of these methods and ways to combine these methods to achieve better strategies for telling stories about ourselves and about the past and present.

Instructor(s): D. Zhao Terms Offered: Not offered 2013-14

#### SOCI 50087. Max Weber's Sociology of Religion. 100 Units.

Max Weber is perhaps the one undisputed classical figure in the discipline of sociology today. His reputation is to a large extent based on his historical and comparative studies of the "economic ethics" of the world religions and on the formulation of a systematic approach for the historical-sociological study of religion (in the relevant chapter of his "Economy and Society"). The seminar will start with a close reading of the religion chapter in "Economy and Society" and then continue with selections from his comparative studies. The focus of interest will not only be on Weber's theory, but also on the present state of research on the questions Weber was dealing with.

Instructor(s): H. Joas Terms Offered: Not offered 2013-14

Equivalent Course(s): AASR 50087,SCTH 50087

SOCI 50089. Seminar: Race and Ethnicity. 100 Units.

Instructor(s): S. Washington Terms Offered: Spring

# SOCI 60020. 1st-Year Colloquium: Research Questions and Design. 000 Units.

A required, non-credit colloquium for first-year doctoral students in Sociology. The Colloquium addresses how to generate research questions and design projects through the current work of department faculty.

Instructor(s): K. Cagney Terms Offered: Autumn, Winter, Spring

Prerequisite(s): 1st-year Sociology PhD students only



# THE WILLIAM B. AND CATHERINE V. GRAHAM SCHOOL OF CONTINUING LIBERAL AND PROFESSIONAL STUDIES

The William B. and Catherine V. Graham School of Continuing Liberal and Professional Studies extends the University's academic values to a broad local, national, and international (https://grahamschool.uchicago.edu/international) community of adult learners. Throughout our history we have provided innovative, strategic learning solutions to individuals as well as to private, not-for-profit, and public sector organizations in the liberal arts, business, and professions.

We offer numerous credit and noncredit learning opportunities—from traditional disciplines such as literature and philosophy, to business-oriented courses, to a master's degree in threat and response management. To fit the schedule of working adults, most courses are located at the University of Chicago Gleacher Center (https://grahamschool.uchicago.edu/maps) in downtown Chicago and in the evenings and on weekends. We do offer courses at other times, in Hyde Park (https://grahamschool.uchicago.edu/maps), and online (https://grahamschool.uchicago.edu/online).

This page describes most of our programs and lists others. Our programs are divided into these categories:

- Credit Programs (https://upcomingcatalog.uchicago.edu/graduate/ thegrahamschoolofgeneralstudies/#Credit) - masters degree programs, graduate level postgraduate certificate programs, and graduate non-degree programs.
- Noncredit (https://upcomingcatalog.uchicago.edu/graduate/ thegrahamschoolofgeneralstudies/#Noncredit) - certificates in the liberal arts and professions, open enrollment courses and programs for personal enrichment and business development.
- Summer (https://summer.uchicago.edu) courses and programs of study for College, visiting, and high school students as well as for adult learners.

# CONTACT US (HTTPS:// GRAHAMSCHOOL.UCHICAGO.EDU/CONTACT)

The University of Chicago Graham School 1427 E. 60th St., Second Floor Chicago, IL 60637 (773) 702-1722

The University of Chicago Gleacher Center 450 N. Cityfront Plaza Dr. Chicago, IL 60611

(312) 464-8655

grahamschool@uchicago.edu

# CREDIT PROGRAMS

# The Graduate Student-at-Large and Returning Scholar Program

The Graduate Student-at-Large and Returning Scholar programs enable eligible students to take graduate and undergraduate courses throughout the University of Chicago without being enrolled in a degree program.

Graduate Students-at-Large take regular University of Chicago courses for grades and credit, allowing students to preview graduate school, define academic focus, and build a transferable record of study. Returning Scholars audit courses, earning neither grades nor credit. The Returning Scholar program is ideal for continued personal and professional development, and skill-based study, e.g. languages.

- program type: graduate-level non-degree program
- courses (https://grahamschool.uchicago.edu/credit/graduate-student-at-large/ registration)
- program structure, requirements, and application (https:// grahamschool.uchicago.edu/credit/graduate-student-at-large/index)
- prospective student contact
- location: Hyde Park Campus (http://visit.uchicago.edu/transportation.shtml/ #maps)
- courses taken: part-time, full-time / weekdays

#### Graduate Student-at-Large/Returning Scholar Business

Graduate Business Students-at-Large Business enables eligible students to take courses in the Chicago Booth School of Business. Students take Booth courses for grades and credit. It is a unique opportunity to experience Chicago Booth faculty and students, build your network, create a transferable record of study, enhance your application to Booth or other MBA programs.

Students are encouraged to attend Chicago Booth admissions events and to contact Booth admissions staff for information about applying to the Evening, Weekend and Full-Time MBA programs.

- program type: graduate-level non-degree programs
- courses (https://grahamschool.uchicago.edu/credit/graduate-student-at-large/ business/registration)
- program structure, requirements, and application (https:// grahamschool.uchicago.edu/credit/graduate-student-at-large/business)
- prospective student contact
- location: Hyde Park Campus (http://visit.uchicago.edu/transportation.shtml/ #maps) and Gleacher Center (https://grahamschool.uchicago.edu/maps)
- courses taken: part-time, full-time / weekday evenings and Saturday mornings

## MASTER OF LIBERAL ARTS

The Master of Liberal Arts program offers courses in the humanities, social sciences, and natural sciences. This program is for adults who wish to explore and be challenged by new ideas and revisit existing ones through new perspectives. Curses are taught by University of Chicago faculty drawn from divisions across the University. This is a graduate program mainly for those seeking self-enrichment, but the program also serves as context for further graduate studies and career advancement.

- program type: masters degree program
- courses (https://grahamschool.uchicago.edu/sites/grahamschool.uchicago.edu/ files/MLA%2020132014%20Courses%202.pdf)
- program structure, requirements, and application (https://grahamschool.uchicago.edu/credit/master-liberal-arts/index)
- prospective student contact (http://catalog.uchicago.edu/graduate/ thegrahamschoolofgeneralstudies/Mailto:%20mla@uchicago.edu)
- location: Gleacher Center (https://grahamschool.uchicago.edu/maps)
- part-time, full-time / weekday evenings and Saturday mornings
- time to completion: 1-5 years

#### MASTER OF SCIENCE IN ANALYTICS

The Master of Science in Analytics will give students thorough knowledge of techniques in the field of analytics, and the ability to apply them to real-world business scenarios. Building from a core in applied statistics, students will be provided with advanced analytical training to develop their ability to draw insights from big data, including: data collection, preparation and integration; statistical methods and modeling; and other sophisticated techniques for analyzing complex data. The program is highly applied in nature, integrating business strategy, project-based learning, simulations, case studies, and specific electives addressing the analytical needs of various industry sectors. Through partnerships with key employers, the program also provides students with applied projects and data sets as well as access to career networks and employment pathways upon graduation.

- program type: masters degree program
- program structure, courses, requirements, and application (https://grahamschool.uchicago.edu/credit/master-science-analytics/index)
- prospective student contact
- location: Gleacher Center (https://grahamschool.uchicago.edu/maps)
- part-time / weekday evenings and Saturday mornings
- time to completion: 1.5-4 years

#### MASTER OF SCIENCE IN THREAT AND RESPONSE MANAGEMENT

The Master of Science in Threat and Response Management is a multidisciplinary program of study designed to prepare public health professionals, law enforcement officials, fire and emergency personnel, medical and nursing professionals, policy makers, and those in related fields to respond to and recover from complex incidents regardless of their size or cause. These incidents can include: terrorist

attacks; biological, chemical, radiological and nuclear threats; natural disasters; disease outbreaks, and more. As a student in the program, you will gain knowledge about these areas from instructors who have tactical experience in incident command, net work and share lessons with colleagues, policy makers, and other officials.

- program type: masters degree program
- courses
- program structure, requirements, and application (https:// grahamschool.uchicago.edu/credit/master-science-threat-response-management/ index)
- prospective student contact
- location: Gleacher Center (https://grahamschool.uchicago.edu/maps)
- part-time / executive format-classes meet for three extended weekends each quarter: Autumn, Winter, Spring
- time to completion: 2 years

## MASTER OF ARTS IN TEACHING

The University of Chicago's Urban Teacher Education program (UChicago UTEP) offers a Master of Arts in Teaching degree and an Illinois Teaching Certificate in grades K-9, with endorsements available in all middle school subjects, or an Illinois Teaching Certificate in grades 6-12 in Math or Biology. UChicago UTEP has many features that distinguish it from traditional teacher education programs. Its rigorous curriculum and in-depth clinical experiences not only equips students with the knowledge, skills and ability to teach, but also prepares them to become successful and reflective teachers who are attuned to the social, cultural and economic circumstances of their students. Over eight quarters, students receive instruction which includes exploring aspects of the teaching profession that contribute to social injustice. Through guided field visits to Chicago Public Schools, UChicago UTEP students learn how to observe students, collect data about schools, and reflect and document their experiences. Students continue to develop their teaching practice through one-on-one paid tutoring sessions at the University's charter schools. The clinical experience of the program affords students two 18-week classroom rotations where they are paired with experienced teachers to further develop a teaching practice. Alumni receive support with job placement, in-classroom coaching, planning and professional development for two years, free of charge.

- program type: masters degree program
- program structure, requirements, and application (http://utep.uchicago.edu)
- prospective student contact (http://utep.uchicago.edu/page/learn-more)
- location: Hyde Park Campus (http://utep.uchicago.edu/page/visit) and Chicago Public Schools
- part-time during the first year and full-time after / weekdays
- time to completion: 2 years

## QUANTITATIVE METHODS FOR THE SOCIAL AND BEHAVIOR SCIENCES

The Quantitative Methods for the Social and Behavior Sciences program offers training in statistical techniques and social science theory to non-academic research professionals and aspiring graduate students in the social and behavioral sciences. Through the program, students are able to develop knowledge of basic and sophisticated techniques for data analysis, develop working knowledge of Stata software, enhance readiness for graduate degree programs in the social and behavioral sciences, and earn graduate-level course credit.

- program type: postgraduate credit-based certificate program
- program structure, courses, requirements, and application (https://grahamschool.uchicago.edu/credit/quantitative-methods/index)
- prospective student contact
- location: Hyde Park Campus (http://visit.uchicago.edu/transportation.shtml/ #maps) and Gleacher Center (https://grahamschool.uchicago.edu/maps) for the foundational courses
- courses taken: part-time, full-time / weekdays (2 foundational courses evenings and Saturdays)
- time to completion: 1 to 3 years

## MEDICAL PHYSICS

The Postgraduate Certificate in Medical Physics, in partnership with CAMPEP and the University of Chicago Committee on Medical Physics, is an accredited program that provides instruction in medical physics to students holding PhDs in physics. This program is designed to help students with PhDs in physics transition to a medical physics profession.

Students will attain competency in imaging and radiation physics, related mathematics, and biological principles. They will also obtain hands-on laboratory training with innovators in the field. Upon completion of the program, graduates will be eligible to enter CAMPEP-approved residency programs upon completion of the certificate.

- program type: postgraduate credit-based certificate program
- program structure, courses, requirements, and application (https://grahamschool.uchicago.edu/credit/medical-physics/index)
- prospective student contact
- location: Hyde Park Campus (http://visit.uchicago.edu/transportation.shtml/ #maps) and Gleacher Center (https://grahamschool.uchicago.edu/maps)
- courses taken: full-time / weekdays
- time to completion: 1 year

## Noncredit

## ARABIC LANGUAGE AND CULTURES

Students in the Arabic Language and Cultures program will learn how to communicate practical, everyday information in Arabic. Students will not only

develop Arabic language skills in listening, speaking, reading, and writing, but also gain an understanding of the culture and history of the Arabic world. The certificate program is divided into three levels: beginning, continuing, and spoken colloquial Arabic. A certificate is awarded upon completion of each level.

- · program type: certificate
- courses (https://grahamschool.uchicago.edu/courses? sku=&field\_quarter\_value=All&field\_course\_description\_value=&field\_last\_name\_inst\_value
- program structure, requirements, and application (https:// grahamschool.uchicago.edu/noncredit/certificates/arabic/index)
- prospective student contact
- location: Gleacher Center (https://grahamschool.uchicago.edu/maps)
- part-time / Saturdays (summer courses take place on weekday evenings)
- time to completion: 1-5 years

### ARTIFACT COLLECTION CARE

The Artifact Collection Care Certificate program will provide students with the skills and knowledge you need to care for a collection of art and artifacts at organizations such as small museums and historical societies or in your personal collection. With instructors drawn from the leading cultural organizations throughout Chicago, students will be offered exclusive, behind-the-scenes experiences with historical objects, photographs, papers, textiles, art, and other items. You will learn how to track and organize collections, handle and label objects, prepare objects for storage, and protect objects from light and other environmental damage. Upon completion of the certificate, you will have developed techniques to manage a variety of collections, even with limited resources.

- program type: certificate
- courses (https://grahamschool.uchicago.edu/courses? sku=&field\_quarter\_value=All&field\_course\_description\_value=&field\_last\_name\_inst\_value
- program structure, course locations, requirements, and application (https://grahamschool.uchicago.edu/noncredit/certificates/artifact-collection-care/index)
- prospective student contact
- part-time / weekday evenings and Saturday mornings
- time to completion: 1-3 years

## ASIAN CLASSICS

Go behind the news to discover cultures from the inside out. Learn about the religion and cultures of Islam. Study countries such as China, India, or Japan. Heighten your awareness of extraordinary civilizations that have existed for millennia. In the Asian Classics program you can deepen your understanding of other cultures, challenge common assumptions about "Eastern" and "Western" civilizations, engage in conversation with instructors immersed in other cultures and with fellow students who value civil discourse and critical thinking, and become a better citizen of the world through all of the above.

• program type: certificate

- courses and course schedules (https://grahamschool.uchicago.edu/ courses?sku=&field\_quarter\_value=All&field\_year\_value[value]
   [year]=&field\_program\_tags\_tid=23&field\_course\_tags\_tid=All&field\_professional\_developm
- program structure, requirements, and application (https:// grahamschool.uchicago.edu/noncredit/certificates/asian-classics/index)
- prospective student contact
- location: Gleacher Center (https://grahamschool.uchicago.edu/maps)
- part-time
- time to completion: 4 years

## BASIC PROGRAM OF LIBERAL EDUCATION FOR ADULTS

In an era of blogs and sound bites, the University of Chicago is committed to the notion that there is no substitute for reading and discussing important texts. The Basic Program brings liberal arts at the University of Chicago to adult students. What is "basic" about the Basic Program? The liberal arts provide a solid base for all walks of life. The program is modeled on the Common Core, the backbone of an undergraduate education at the University of Chicago. Why study the liberal arts through the Basic Program? There are no tests, papers, or grades and it engages its students in precise thinking and civil discourse.

- program type: certificate
- courses (https://grahamschool.uchicago.edu/courses? sku=&field\_quarter\_value=All&field\_year\_value[value] [year]=&field\_program\_tags\_tid=7&field\_course\_tags\_tid=All&field\_professional\_development
- program structure, requirements, and application (https:// grahamschool.uchicago.edu/noncredit/certificates/basic-program/index)
- prospective student contact
- location: Hyde Park Campus (http://visit.uchicago.edu/transportation.shtml/ #maps) and Gleacher Center (https://grahamschool.uchicago.edu/maps)
- part-time / weekday mornings and evenings at Gleacher; Saturday mornings in Hyde Park
- time to completion: 4 years

## CLINICAL TRIALS MANAGEMENT AND REGULATORY COMPLIANCE

This certificate program provides comprehensive training across the entire clinical trials process from the perspective of the clinical study site as well as that of the sponsor or monitor. The program's curriculum covers good clinical practices, regulatory requirements and compliance, detecting fraud and misconduct, and statistics for clinical research. Certificate recipients will have the skills and knowledge to initiate clinical research studies, apply monitoring methods, and write documents and reports, while understanding and abiding by regulations.

- program type: certificate
- courses and course schedules (https://grahamschool.uchicago.edu/courses? sku=&field\_quarter\_value=All&field\_program\_tags\_tid=10&field\_course\_tags\_tid=All&field\_

- program structure, requirements, and application (https:// grahamschool.uchicago.edu/noncredit/certificates/clinical-trials-management/ index)
- prospective student contact
- location: Gleacher Center (https://grahamschool.uchicago.edu/maps). Program also offered online.
- part-time
- time to completion: 2.5 years

## COMMUNITY HEALTH ADVOCACY

The Certificate in Community Health Advocacy is designed to address an immediate need for trained staff to manage ongoing health services to a variety of post-acute care, chronically ill, aging, and low-income patients. Students will: develop their capabilities as health advocates and coaches in a variety of circumstances; work with patients to help them manage their chronic medical conditions; help patients to understand the implications and intentions of care providers' decisions and instructions; and learn the processes, roles, expectations, and regulations of the healthcare system.

- program type: certificate
- ourses and course schedules (https://grahamschool.uchicago.edu/ courses?sku=&field\_quarter\_value=All&field\_year\_value[value]
   [year]=&field\_program\_tags\_tid=19&field\_course\_tags\_tid=All&field\_professional\_developm
- program structure, requirements, and application (https:// grahamschool.uchicago.edu/noncredit/certificates/community-health-advocacy/ index)
- prospective student contact
- location: Gleacher Center (https://grahamschool.uchicago.edu/maps)
- part-time
- time to completion: 3 years

## CREATIVE WRITING AND THE WRITER'S STUDIO

Whether you are just starting out or looking to push your writing to the next level, join our students who have had work published, won honors and awards, and become the writers they wanted to be. The Writer's Studio offers these benefits for our students: personalized instruction from high-quality instructors, inspiring interaction with other serious writers, learning opportunities uniquely designed for adult students, and convenient downtown location.

- program type: certificate
- courses and course schedules (https://grahamschool.uchicago.edu/ courses?sku=&field\_quarter\_value=All&field\_year\_value[value]
   [year]=&field\_program\_tags\_tid=24&field\_course\_tags\_tid=All&field\_professional\_developm
- program structure, requirements, and application (https:// grahamschool.uchicago.edu/noncredit/certificates/creative-writing-writersstudio/index)

- prospective student contact
- location: Gleacher Center (https://grahamschool.uchicago.edu/maps)
- part-time
- time to completion: 2 years

### EDITING

The Editing Certificate is a focused sequence of courses designed to prepare individuals for employment in today's publishing industry. In addition to core courses focused on manuscript editing, students can take electives and learn about the emerging technologies and marketing tools that dramatically affect publishing professionals today.

- program type: certificate
- courses and course schedules (https://grahamschool.uchicago.edu/ courses?sku=&field\_quarter\_value=All&field\_year\_value[value]
   [year]=&field\_program\_tags\_tid=11&field\_course\_tags\_tid=All&field\_professional\_developm
- program structure, requirements, and application (https://grahamschool.uchicago.edu/noncredit/certificates/editing/index)
- prospective student contact (http://catalog.uchicago.edu/graduate/ thegrahamschoolofgeneralstudies/aneff@uchicago.edu)
- location: Gleacher Center (https://grahamschool.uchicago.edu/maps)
- part-time
- time to completion: up to 2 years

### FINANCIAL DECISION MAKING

Accounting and business finance courses in the Financial Decision Making Certificate Program will start or refresh your career in finance or prepare you for top-ranked MBA programs. Classes meet in downtown Chicago. Two rigorous required courses in financial accounting and corporate finance will lay a foundation for any successful career involving business finance. You will get to choose two elective courses (or more, if you wish) from a varying list of offerings in economics, managerial analysis (also called managerial accounting), corporate budgeting, securities and investments, and other topics.

- program type: certificate
- courses and course schedules (https://grahamschool.uchicago.edu/courses?sku=&field\_quarter\_value=All&field\_year\_value[value]
  [year]=&field\_program\_tags\_tid=12&field\_course\_tags\_tid=All&field\_professional\_developm
- program structure, requirements, and application (https:// grahamschool.uchicago.edu/noncredit/certificates/financial-decision-making/ index)
- prospective student contact
- location: Gleacher Center (https://grahamschool.uchicago.edu/maps)
- part-time
- time to completion: up to 1.5 years

## INTEGRATED MARKETING

Marketing, advertising, media, and public relations courses in the Integrated Marketing Certificate Program will start your marketing career or refresh it with new thinking. Classes meet in downtown Chicago. Students take six courses. Three required courses build a solid, up-to-date foundation: Successful Marketing: Basics to New Directions, Branding for Competitive Advantage, and Managing Integrated Marketing Communications. Choose three elective courses from offerings in marketing research, advertising, digital and traditional media, public relations, and more.

- program type: certificate
- courses and course schedules (https://grahamschool.uchicago.edu/ courses?sku=&field\_quarter\_value=All&field\_year\_value[value]
   [year]=&field\_program\_tags\_tid=13&field\_course\_tags\_tid=All&field\_professional\_developm
- program structure, requirements, and application (https://grahamschool.uchicago.edu/credit/master-liberal-arts/index)
- prospective student contact
- location: Gleacher Center (https://grahamschool.uchicago.edu/maps)
- part-time / weekday evenings and, for each course, a Saturday is required
- time to completion: 1.5 years

## Leadership in Sustainability Management

Build on your skills and knowledge and help prepare yourself to take the lead in sustainability. This noncredit certificate will help you manage your organization's efforts to go and stay "green." The Leadership in Sustainability Management Certificate is built on the University of Chicago Graham School's tradition of liberal education, applied to our most pressing modern challenges. It brings together University faculty with practitioners in the field to provide courses drawing on the latest research plus real world experience.

- program type: certificate
- courses and course schedules (https://grahamschool.uchicago.edu/ courses?sku=&field\_quarter\_value=All&field\_year\_value[value]
   [year]=&field\_program\_tags\_tid=14&field\_course\_tags\_tid=All&field\_professional\_developm
- program structure, requirements, and application (https:// grahamschool.uchicago.edu/noncredit/certificates/leadership-sustainabilitymanagement/index)
- prospective student contact
- location: Hyde Park Campus and Gleacher Center (https://grahamschool.uchicago.edu/contact)
- part-time
- time to completion: 1 year

## MEDICAL WRITING AND EDITING

The Graham School's Certificate in Medical Writing and Editing is designed to teach students the fundamentals and best practices of crisp, clear, and sophisticated medical writing and editing. The certificate offers a mix of courses focused on

writing and editing taught by experienced, expert instructors working in the medical publishing field.

- program type: certificate
- courses and course schedules (https://grahamschool.uchicago.edu/courses? sku=&field\_quarter\_value=All&field\_program\_tags\_tid=15&field\_course\_tags\_tid=All&field\_
- program structure, requirements, and application (https:// grahamschool.uchicago.edu/noncredit/certificates/medical-writing-editing/index)
- prospective student contact
- location: Gleacher Center (https://grahamschool.uchicago.edu/maps)
- part-time
- time to completion: up to 2 years

## NON-PROFIT BOARD LEADERSHIP

Develop the knowledge you need to become a successful board member of a small southside arts organization. The training you receive will enable you to make a positive impact while building your professional skills and civic responsibility. The Civic Knowledge Project's (https://grahamschool.uchicago.edu/noncredit/personal-enrichment/civic-knowledge/index) Southside Arts & Humanities Network (The Network) offers a Non-Profit Board Leadership program designed to leverage the University resources to provide participating South Side cultural organizations with talent for their boards. The Board Leadership program is unique in two ways: First, it aims to serve small and emerging arts and humanities organizations with annual budgets of less than \$500,000. These organizations often have "working boards" that require dedication. Second, this program is "by the Southside, for the Southside" — with an emphasis on connecting the intellectual resources of the University of Chicago community with the cultural resources of local non-profits. The program will train participants and match their skills and interests with one of 10 selected small South Side cultural institutions.

- program type: certificate
- program structure, courses, requirements, and application (https://grahamschool.uchicago.edu/noncredit/certificates/board-leadership/index)
- prospective student contact
- location: Hyde Park Campus and Gleacher Center (https://grahamschool.uchicago.edu/contact)
- part-time
- time to completion: .25 years

## PATIENT CARE COORDINATION

The certificate will help students develop the skill needed to build the next generation of patient care processes, with an eye on care delivery systems engineered on the patient-centered medical home model or related new delivery models. Students will build professional capabilities to: work with patients to explain healthcare decisions and insurance and payment options; serve as patient advocate and liaison between patients and providers; and enhance their skills in

healthcare case management--all with the aim of improving patient outcomes and reducing costs.

- program type: certificate
- courses and course schedules (https://grahamschool.uchicago.edu/ courses?sku=&field\_quarter\_value=All&field\_year\_value[value]
   [year]=&field\_program\_tags\_tid=20&field\_course\_tags\_tid=All&field\_professional\_developm
- program structure, requirements, and application (https:// grahamschool.uchicago.edu/noncredit/certificates/patient-care-coordination/ index)
- prospective student contact
- location: Gleacher Center (https://grahamschool.uchicago.edu/maps) and online
- part-time
- time to completion: 2.5 years

## PROJECT MANAGEMENT PROGRAMS

Our Projet Management programs provide the tools necessary to respond to the challenges associated with increasing project complexity, tight budgets, and tighter deadlines. Students have the opportunity to learn from their peers in this highly interactive environment as well as address topics most critical to their success.

- · program type: certificate
- program structure, courses, schedules, requirements, and application (https://grahamschool.uchicago.edu/noncredit/certificates/project-management/index)
- prospective student contact
- location: Gleacher Center (https://grahamschool.uchicago.edu/maps) and online
- part-time
- time to completion: 2.5 years

## Project Management Strategy

This certificate program is for those wishing to expand upon their practical experience in the field:

- A well-rounded intermediate program for experienced professionals with at least 3-5 years of business professional experience.
- All participants earn PDUs from the Project Management Institute.
- Broad menu of elective choices introduces you to terms and concepts as well as the strategic, leadership, human resources and operational requirements to be a successful project manager.
- Anyone with at least 3-5 years of business experience is invited to register for just one course before applying to the program.

## ADVANCED PROJECT MANAGEMENT

This program lets you take advantage of your experience while earning continuing education credits (PDUs) in a meaningful way. Benefits include:

- Interaction with peers in advanced courses sharing similar levels of experiences.
- In-depth study of topics directly pertinent to organizational success.

- All participants earn PDUs from the Project Management Institute.
- Meet continuing educational requirements with courses that will hold your interest while expanding your knowledge base.
- Freedom to choose the courses that are the most important to you professionally.
- Students must have 7-10 years of progressive project management experience, and may take courses without enrolling in the program.

## TRANSLATION STUDIES

The need for trained translators only continues to grow, and students can gain the necessary skills and knowledge to succeed in the field in the Graham School's Translation Studies Certificate. The Translation Studies Certificate program offers several benefits for students: A unique hybrid courses - each course is first a 3-day seminar followed by an online practicum or final project, students can choose from one of our six different language tracks, study in an ATA approved program.

- · program type: certificate
- courses and course schedules (https://grahamschool.uchicago.edu/ courses?sku=&field\_quarter\_value=All&field\_year\_value[value]
   [year]=&field\_program\_tags\_tid=18&field\_course\_tags\_tid=All&field\_professional\_developm
- program structure, requirements, and application (https:// grahamschool.uchicago.edu/noncredit/certificates/translation-studies/index)
- prospective student contact
- location: Gleacher Center (https://grahamschool.uchicago.edu/maps)
- part-time
- time to completion: up to 2 years

## VISUAL ARTS

The Visual Arts Certificate Program offers you the opportunity to build upon your studio practice while at the same time providing practical courses designed to enhance your career across many dimensions. Offered in partnership with the Hyde Park Art Center, the program is designed to help you further your art practice, while developing strengths in critiquing, teaching, presenting, and writing about art. Curating exhibitions, negotiating contracts, conducting studio visits and writing press releases are just some of the professional practices that artists can master, yet instruction in these skills is largely absent from BFA and MFA curricula. The program aims to fill the experiential gap that exists in traditional programs.

- program type: certificate
- courses and course schedules (https://grahamschool.uchicago.edu/ courses?sku=&field\_quarter\_value=All&field\_year\_value[value]
   [year]=&field\_program\_tags\_tid=41&field\_course\_tags\_tid=All&field\_professional\_developm
- program structure, location of courses, requirements, and application (https://grahamschool.uchicago.edu/noncredit/certificates/visual-arts/index)
- prospective student contact
- part-time
- time to completion: up to 3 years

## ADDITIONAL GRAHAM SCHOOL NONCREDIT PROGRAMS

PERSONAL ENRICHMENT

CIVIC KNOWLEDGE (HTTPS://GRAHAMSCHOOL.UCHICAGO.EDU/NONCREDIT/PERSONAL-ENRICHMENT/CIVIC-KNOWLEDGE/INDEX)

KNOW YOUR CHICAGO (HTTPS://

GRAHAMSCHOOL.UCHICAGO.EDU/NONCREDIT/PERSONAL-ENRICHMENT/KNOW-YOUR-CHICAGO/INDEX)

LECTURE SERIES (HTTPS://GRAHAMSCHOOL.UCHICAGO.EDU/NONCREDIT/PERSONAL-ENRICHMENT/LECTURE-SERIES/INDEX)

OPEN ENROLLMENT COURSES (HTTPS://

GRAHAMSCHOOL.UCHICAGO.EDU/COURSES?

SKU=&FIELD\_QUARTER\_VALUE=ALL&FIELD\_PROGRAM\_TAGS\_TID=ALL&FIELD\_

TRAVEL STUDY (HTTPS://GRAHAMSCHOOL.UCHICAGO.EDU/

NONCREDIT/PERSONAL-ENRICHMENT/TRAVEL-STUDY/INDEX)

Professional Development

AMERICAN SOCIETY OF APPRAISERS (HTTPS://

GRAHAMSCHOOL.UCHICAGO.EDU/NONCREDIT/CERTIFICATES/

AMERICAN-SOCIETY-APPRAISERS/INDEX)

CORPORATE AND CUSTOM TRAINING (HTTPS://

GRAHAMSCHOOL.UCHICAGO.EDU/NONCREDIT/PROFESSIONAL-

DEVELOPMENT/CORPORATE-CUSTOM-TRAINING/INDEX)

NATIONAL MUSEUM PUBLISHING SEMINAR (HTTPS://

GRAHAMSCHOOL.UCHICAGO.EDU/NONCREDIT/PROFESSIONAL-

DEVELOPMENT/NATIONAL-MUSEUM-PUBLISHING/INDEX)

## SUMMER

The University of Chicago offers numerous summer learning opportunities for students of all ages through the Graham School.

High school students can live and work as undergraduates at the University, studying subjects such as law, writing, economics, and cutting-edge biological research, or even study abroad in Greece or participate in a paleontological dig. Visiting students from other colleges and universities can also study on-campus during the summer, taking advantage of the University's intensive language courses and other regular undergraduate course offerings. For adult students, the School offers noncredit courses, lectures, and events downtown. No matter what your interests are or where you wish your goals to take you, we are certain you can find myriad possibilities to enrich your summer at the Graham School.

THE UNIVERSITY OF CHICAGO SUMMER SESSION PROGRAMS (HTTPS://SUMMER.UCHICAGO.EDU)
BASIC PROGRAM SUMMER COURSES
LIBERAL ARTS SUMMER COURSES
PROFESSIONAL DEVELOPMENT SUMMER COURSES
WRITER'S STUDIO SUMMER COURSES

## ONLINE

The Graham School currently offers two of its programs in full in an online format: the Clinical Trials and Regulatory Compliance Certificate Program, and the Medical Writing and Editing Certificate Program. Community Health Advocacy (https://grahamschool.uchicago.edu/noncredit/certificates/community-health-advocacy/index) and Patient Care Coordination (https://grahamschool.uchicago.edu/noncredit/certificates/patient-care-coordination/index) have online components.

We are continually working to expand our online learning opportunities. If you would like to speak with a staff member about specialized group online training, please conact us at grahamschool@uchicago.edu.



# THE UNIVERSITY OF CHICAGO BOOTH SCHOOL OF BUSINESS

Founded in 1898, the University of Chicago Booth School of Business (http://www.chicagobooth.edu) is the second-oldest business school in the United States and one of the most distinguished. The school's programs consistently rank highly in surveys, and the school has a strong reputation for innovation in both research and teaching. For example, Chicago Booth faculty (http://www.chicagobooth.edu/faculty/directory) have made significant contributions in the areas of finance, the economics of regulation, and decision making. For more than a century, Chicago Booth has been known as an innovator in business education and a creator of ideas.

In autumn 2004 Chicago Booth opened its Hyde Park Center. Named the Charles M. Harper Center in 2007, this facility brought together all of Chicago Booth's previously existing Hyde Park campus buildings into one 415,000-square-foot space. Located at 5807 South Woodlawn Avenue, Harper Center was designed around how teachers want to teach and how students want to learn. With the opening of Harper Center, Chicago Booth could lay claim to the best business school facilities in the world. Chicago Booth is the only business school with permanent campuses on three continents. Built in 1994, Gleacher Center, off Michigan Avenue in downtown Chicago, provides state-of-the-art executive education and conference facilities and is home to the school's part-time MBA programs. In London, Woolgate Exchange is the home of the school's Executive MBA Program Europe. In Singapore, the House of Tan Yeok Nee, a renovated historic building in the center of Singapore's business and government district, is the location for the Executive MBA Program Asia.

The University of Chicago Booth School of Business offers six programs of study leading to a degree: four leading to an MBA (the Full-Time MBA Program, the Evening MBA Program, the Weekend MBA Program, and the Executive MBA Program), one leading to an IMBA (the International MBA Program), and the PhD Program.

## THE FULL-TIME MBA PROGRAM

The MBA curriculum is designed to prepare students for significant careers in management. It encompasses both the basic disciplines that underlie management and the operational areas specific to business. The courses are designed to provide understanding of the components of managerial decision making while furnishing perspective on the role of business as an economic, political, and social institution.

The MBA experience is not restricted to the classroom at Chicago Booth. Although Booth is not a case study institution, a substantial percentage of the total course work, depending on the student's choice of classes, will consist of various kinds of cases and applied analyses. Because of the school's location in one of the world's major commercial centers, students meet business, economic, labor, and political leaders at the numerous lecture and seminar series held on campus and through alumni and friends in Chicago's business community.

Freedom of choice is a way of life at Chicago Booth. Professors are free to use the teaching method they believe to be most effective; students are free to choose the courses (http://boothportal.chicagobooth.edu/portal/server.pt/community/course\_search/205) and professors (http://www.chicagobooth.edu/faculty/directory) from whom they can best learn. In addition, students are encouraged to make use of the resources of the entire university and take advantage of the critical and intellectual diversity that thrives on the campus. The Chicago Booth MBA is characterized by a willingness to experiment, to judge people by their performances rather than their origins, to judge ideas by their consequences rather than their antecedents.

Chicago Booth's Leadership Effectiveness and Development Program (http://www.chicagobooth.edu/programs/full-time/academics/lead) (LEAD) was founded in 1989 as one of the first experiential leadership programs at a major business schools. Held during autumn quarter and lead by second-year student facilitators, the program provides a common educational experience within a curriculum that has always offered exceptional flexibility. This required, noncredit course for full-time program students is designed to enhance self-awareness and interpersonal effectiveness through a varied and highly interactive curriculum. Through these experiences, students will enhance their mastery of three of the most important aspects of leadership: building relationships, inspiring others, and influencing outcomes. Other class activities in autumn quarter revolve around the 10 student cohorts assigned during LEAD that help build a sense of community, instill the value of teamwork, and acquaint students with the school.

The school admits persons with a wide variety of backgrounds. The normal prerequisite is a four-year bachelor's degree, or equivalent, from an accredited institution. Students who do not have a bachelor's degree may apply to the school for special eligibility. Those interested in consideration for special eligibility must receive approval before an application is submitted and should, therefore, write to the director of admissions for further information.

Requests for an application and other inquiries should be addressed to the Office of Admissions and Financial Aid, The University of Chicago Booth School of Business, 5807 South Woodlawn Avenue, Chicago, Illinois 60637, phone: 773.702.7369, email: admissions@ChicagoBooth.edu. Admissions information is also available online (http://www.chicagobooth.edu/programs/full-time/admissions).

## THE INTERNATIONAL MBA PROGRAM

The University of Chicago Booth School of Business also offers an international MBA (IMBA) degree. This program provides students with in-depth training in business fundamentals as well as the skills and training required to be competitive at the global level.

The core of the IMBA program draws on the traditional strengths of the school's MBA program. Students enjoy flexibility in course selection, few absolute course requirements, and access to the best business faculty in the world. They grasp the fundamentals of business and develop the skills necessary to apply those fundamentals in real world situations.

In addition, IMBA students develop a broad set of intercultural skills necessary for successful careers in international business. They master a foreign language, spend at least one term of study abroad, participate in specialized multicultural programming, and potentially work on real company projects as part of specially tailored project courses while studying overseas. International education is delivered by Booth faculty, world-renowned scholars from other units of the university (such as East Asian Studies or International Relations), and by faculty from partner universities around the globe.

Though the IMBA contains additional requirements, the IMBA program is completed in the same time frame as the traditional MBA program. As a result, most students should expect to complete the program in the twenty-one months usually required for the MBA program. Since expertise in international business is implicit in the IMBA degree, recognition of an international business concentration would be redundant; therefore, no IMBA student may declare an international business concentration.

Acceptance into the IMBA program is based first on gaining admission to the Full-Time MBA Program. During the first quarter of enrollment students may declare their intention to follow the IMBA curriculum. To obtain an MBA application, contact the Office of Admissions and Financial Aid, The University of Chicago Booth School of Business, 5807 South Woodlawn Avenue, Chicago, Illinois 60637, or phone 773.702.7369. Admissions information is also available online (http://www.chicagobooth.edu/programs/full-time/admissions).

## THE PART-TIME MBA PROGRAMS

## THE EVENING MBA PROGRAM

The University of Chicago pioneered the concept of part-time MBA study for men and women employed in management and the professions. Even though the school's Evening MBA Program is more than fifty years old, it is still unique in the field of management education because it is identical in every important way to the full-time program. Entrance requirements and degree requirements are the same for both programs, and courses are taught by the same faculty.

While the academic aspects of the full-time and part-time programs are the same, their logistics are quite different. Evening MBA classes meet on weeknights in the school's convenient downtown location at Gleacher Center, 450 North Cityfront Plaza Drive, along the north bank of the Chicago River between Michigan Avenue and Columbus Drive. Approximately 1,600 students from a diverse background of job functions and industries are currently engaged in part-time study in the program. Many of the students come from Chicago area banks and financial institutions; heavy industry, consulting, advertising, and the entrepreneurial and nonprofit sectors also are well represented. Job titles of current students range from new management trainees to senior executive officers.

Evening MBA students are required to complete Leadership Exploration and Development. This program is initiated during Launch, an orientation program, and continues throughout the program of study.

Classes are available in all four academic quarters. Students completing two courses per quarter will fulfill the program requirements in two-and-one-half years, although the average graduation time is approximately three years. All MBA candidates are allowed a maximum of five years to complete the degree program.

Admissions information is available online (http://www.chicagobooth.edu/programs/evening/admissions).

## THE WEEKEND MBA PROGRAM

Many managers often find it convenient to take their classes on Saturdays due to travel schedules or the location of their offices far from Chicago. To meet the needs of individuals and their companies, Booth provides an additional avenue of continuing education in its Weekend MBA Program. Students take courses on Saturday mornings and Saturday afternoons at the convenient downtown Gleacher Center and thereby can complete the MBA program in as little as two-and-one-half years. Some students fly in from across the country and around the globe, with over 70 percent of weekend students living outside of Illinois. The Weekend MBA Program follows in the Chicago Booth tradition of offering all MBA candidates the same academic program, same faculty, and same degree as the full-time and evening MBA programs.

Weekend MBA students are required to complete Leadership Exploration and Development. This program is initiated during Launch, an orientation program, and continues throughout the program of study.

Classes are available in all four academic quarters. Students completing two courses per quarter will fulfill the program requirements in two-and-one-half years, although the average graduation time is approximately three years. All MBA candidates are allowed a maximum of five years to complete the degree program.

Admissions information is available online (http://www.chicagobooth.edu/programs/weekend/admissions).

## THE PHD PROGRAM

The PhD Program is an integral part of Chicago Booth. The school began the first PhD program in business in the United States in 1920 and awarded its first PhD degree in 1922. Since then, more than five hundred degrees have been granted.

The program leading to the degree of doctor of philosophy is designed for students of outstanding ability who desire advanced studies in preparation for careers in university teaching and research. The number of students admitted to the program each year is small and, within the framework of the general requirements described below, programs of study are designed to fit individual interests. Students with a variety of backgrounds are admitted to the program; undergraduates with strong academic backgrounds (e.g., economics, mathematics, psychology, sociology) and strong research interests are encouraged to apply. Students without strong academic backgrounds in their area of study may have to take prerequisite courses in economics, mathematics, or statistics.

Information about the program and application materials may be requested from the PhD Program Office, The University of Chicago Booth School of Business, 5807 South Woodlawn Avenue, Chicago, Illinois 60637, and are available online (http://www.chicagobooth.edu/programs/phd).

## JOINT DEGREE PROGRAMS

Chicago Booth participates in joint degree programs with several other schools and divisions of the University: the Law School; School of Social Service Administration; Pritzker School of Medicine; Irving B. Harris Graduate School of Public Policy; East European/Russian, Middle Eastern, South Asian, and Latin American area study centers; and Committee on International Relations. These programs allow the student to pursue combined programs of study. For more information on the joint MBA/AM programs in international relations or Middle Eastern, East Asian, East European/Russian, Latin American, and South Asian studies, contact the Committee on Joint MBA/AM Programs, The University of Chicago Booth School of Business, 5807 South Woodlawn Avenue, Chicago, Illinois 60637. For all other joint programs, write to the director of admissions of Chicago Booth and the dean of students of the appropriate school.

## THE EXECUTIVE MBA PROGRAM

The Executive MBA Program is a part-time MBA program designed to prepare experienced executives to be more effective general managers.

Each year, approximately 90 students are admitted to each location of study in this intensive, twenty-month program. The Executive MBA Program curriculum emphasizes the value of learning in groups and sharing experiences. Students will participate primarily at one of our three international locations: downtown Chicago (Gleacher Center); London (Woolgate Exchange); or Singapore (The House of Tan Yeok Nee); students will have an opportunity to study at each campus over their program of study in international cohorts. These international cohorts are composed of an equal mix of students from all three campuses and convene for week-long sessions in Chicago, London and Singapore.

Although the format is different, the Executive MBA Program, like all of Chicago Booth's MBA programs, is based on the Chicago approach to business education. This approach emphasizes an understanding of the fundamental forces in the economy, in organizations, and in individuals, and also in applying this understanding to analyze and produce creative, imaginative solutions to real world problems.

Executive MBA students are required to complete Leadership Exploration and Development. This program is initiated during Launch, an orientation program, and continues throughout the program of study.

Courses in the Executive MBA program are taught by full-time members of the faculty. Most courses are cohorted but students are offered elective courses in finance, marketing, strategy, and entrepreneurship for students interested in deepening their knowledge in areas of particular relevance to their careers.

For further information about the program, contact:

Admissions Office of the Executive MBA Program North America The University of Chicago Booth School of Business 450 North Cityfront Plaza Drive Chicago, Illinois 60611 phone: 312.464.8750

email: xp@ChicagoBooth.edu

Admissions Office of the Executive MBA Program Europe The University of Chicago Booth School of Business Woolgate Exchange 25 Basinghall Street London EC2V 5HA United Kingdom phone: 44.(0)20.7643.2200 email: europe.inquiries@ChicagoBooth.edu

Admissions Office of the Executive MBA Program Asia The University of Chicago Booth School of Business 101 Penang Road Singapore 238 466 phone: 011.65.6835.6482

email: asia.inquiries@ChicagoBooth.edu

## BOOTH BOOK FEE

Effective Autumn 2013, cases, articles, and simulations will be delivered electronically through Chalk, faculty course webpages, or hard-copy in class. Students enrolled in a Booth course will incur a \$25 per course fee, assessed via their tuition bill. Students may be required to purchase a text book in addition to this expense, as this fee replaces only the custom course pack.



## THE DIVINITY SCHOOL

## PROGRAMS OF STUDY

The Divinity School offers programs of study leading to the degrees of Master of Arts (A.M.), Master of Arts in Religious Studies (A.M.R.S.), Doctor of Philosophy (Ph.D.), and Master of Divinity (M.Div.).

The A.M. program is a two-year foundational program in the academic study of religion for students who wish to acquire the requisite skills to develop a research agenda for doctoral study, or to establish a basis for a career in such related fields as education, publishing, government service, nonprofit work, etc.

The A.M. in Religious Studies (A.M.R.S.) is a concentrated program in the study of religion for those in other professions (e.g., law, medicine, business, journalism, the arts) or those who seek greater knowledge of and sophistication in the study of religion. The degree may be pursued in one year, or over a period of three years, taking one or two courses per quarter, allowing students to balance study with existing professional commitments.

The Ph.D. program is a rigorous program of advanced study and research that prepares students for a lifetime of field-defining scholarship, intellectual leadership and teaching in the academic study of religion.

The M.Div. program is an intensive cohort-based three-year course of study that prepares students for public religious leadership both in traditional ministerial professions and in new and emerging forms of ministry.



## THE LAW SCHOOL

The Law School offers a three-year program of professional instruction leading to the degree of Doctor of Law (J.D.). It is designed to prepare students for the practice of law in any American jurisdiction. A bachelor's degree from an approved college is usually a prerequisite to admission, although highly qualified students with only three years of undergraduate studies may be admitted. All applicants must take the Law School Admission Test. Each entering class is limited to approximately 195 students. A student in good standing at an approved American law school who has completed at least one year of law study or a graduate of an approved foreign law school whose studies have been primarily in the common law may apply for admission with advanced standing.

The school offers advanced studies leading to the degrees of Master of Laws (LL.M.), Doctor of Jurisprudence (J.S.D.), Master of Comparative Law (M.Comp.L.), and Doctor of Comparative Law (D.Comp.L.).

What sets Chicago apart from other law schools is its unabashed enthusiasm for the life of the mind and its conviction that ideas matter and are worth discussing. We value legal education and training, not only as preparation for legal careers, but for their own sakes as well. Legal study at Chicago is a passionate venture that begins in the classroom, where the faculty engage their students in a rigorous Socratic dialogue. Chicago's unique first year required course, Elements of the Law, introduces students to the law as an interdisciplinary field and gives them the tools to continue the interdisciplinary inquiry throughout their legal education.

Chicago remains committed to legal education as an education for generalists, although students with particular interests will find it possible to study topics in depth through advanced and more specialized courses.

Emphasizing the acquisition of broad and basic knowledge of law, an understanding of the functioning of the legal system, and the development of analytic abilities of the highest order, a Chicago legal education prepares students for any professional role they might choose: legal practice or legal education, entrepreneurial ventures, international private or public law practice, corporate practice, government service, alternative dispute resolution including arbitration and mediation, or work with nonprofit organizations. Graduates do many things in their careers, and they all take with them the analytic skills emphasized during their years at the Law School.

In addition to a wide array of courses and seminars, second and third year students may participate in a number of clinical programs, including the Prosecution and Defense Clinic, the Gendered Violence and the Law Clinic, the Housing Initiative Clinic, the Criminal and Juvenile Justice Project Clinic, the Civil Rights Clinic: Police Accountability, the Institute for Justice Clinic on Entrepreneurship, the Exoneration Project Clinic, and the Abrams Environmental Law Clinic. In these programs, students engage in supervised practice, including the representation of clients in court.

A significant portion of the faculty specialize in disciplines other than law, such as economics, history, sociology, and political science. The curriculum devotes substantial attention to relevant aspects of economics, legal history, comparative law, psychiatry, statistics, and other social science methodology. In addition to the student edited *University of Chicago Law Review, Legal Forum*, and the *Chicago Journal of International Law*, the school has three scholarly journals the *Supreme Court Review*, the *Journal of Law and Economics*, and the *Journal of Legal Studies*. The Law School is also home to the Center for Comparative Constitutionalism, the Institute for Law and Economics, the Center for Studies in Criminal Justice, and the Legal History Program.

Detailed information on admission, programs, faculty, and facilities is contained in the *Announcements* of the Law School, available online at http://catalogs.uchicago.edu/law-folder/law.html.



# THE IRVING B. HARRIS GRADUATE SCHOOL OF PUBLIC POLICY STUDIES

## PROGRAM OF STUDY

One of six professional schools, the Harris School of Public Policy is part of a world-class intellectual community and continues the University's tradition of scholarship intended to address real-world problems. Established in 1988, the Harris School emerged from the interdisciplinary Committee on Public Policy Studies. Influential founding supporters include educational sociologist James Coleman, urban sociologist William Julius Wilson, and the 2000 Nobel laureate economist James Heckman. From its inception, the Harris School has sought to enhance the University's role in shaping and understanding public life by conducting policy-relevant research and preparing talented individuals to become leaders and agents of social change.

The Harris School offers a Master of Public Policy degree; a one-year Master of Arts degree in public policy studies for students already possessing another professional degree; a Master of Science in Environmental Science and Policy; cooperative programs with the University of Chile, Tel Aviv University, and Yonsei University Graduate School of International Studies; and joint degrees with the Divinity School, The University of Chicago Booth School of Business, the Law School, the School of Social Service Administration and the Center for Middle Eastern Studies. The Harris School also offers a two-year AM/MA with the Committee on International Relations for student interested in combining public policy training with a focus on international relations. In addition, Harris participates in The Professional Option Program with the College, which is a five-year program with student earning a bachelor's degree from the College and a master's degree from the Harris School in five years. The Harris School also offers a Doctor of Philosophy for students seeking research-related careers in academia or elsewhere. In addition, the Harris School offers non-degree training opportunities for public policy professionals. Beginning fall of 2014, Harris will offer a Master of Science in Computational Analysis and Public Policy. Recruiting for this degree program begins fall 2013. A Certificate in Municipal Finance will be offered beginning fall 2013.

An exciting and challenging place to learn, the Harris School's model of public policy training reflects the University of Chicago's tradition of research and teaching — meticulous scholarship, open inquiry, and cross-disciplinary, critical thinking. Faculty come from diverse academic backgrounds and lend their individual expertise to a collaborative curriculum. Students come ready and willing to work and prepare for leadership in public policy. Alumni around the world apply their Harris School training to a multitude of public policy issues, making an impact in whatever arena they choose to work.

The rigorous curriculum stresses the development of analytical tools, which form the basis of the program's approach to understanding the nature of social problems and the impact of public policy. Harris School students become conscientious consumers of social science research and are able to evaluate information and make informed policy choices.

However, classroom training is only part of the equation. The Harris School provides opportunities for students to apply the critical skills that they learn in the classroom to real-world situations. Through a mentor program, internships, and practica, Harris School students are able to enrich their education, network with community leaders, and lend their growing public policy expertise to local, national, and international organizations. The School fosters a spirit of cooperation between students, public policy professionals, faculty, and others to address societal concerns and is constantly seeking new partnership opportunities.

## PROGRAM OVERVIEW

All students are required to fulfill core course requirements to acquire technical and analytical skills for their professional growth and distribution requirements to gain a broad background in policy analysis. However, the flexibility of the program allows students to tailor their course of study to fit their interests through:

- Policy areas (optional), which expose students to the content and complexity of at least one policy domain
- Electives, which offer students an opportunity to acquire training both in the theoretical and applied analysis of public policy issues, and to develop the skills necessary for a professional position in policy analysis

The integration of research and practical training and a multi-disciplinary approach to problem solving underlie all aspects of the program.

## RESEARCH OPPORTUNITIES

Faculty and student research at the Harris School is guided not only by theoretical interests, but also by a strong commitment to solving enduring public policy problems.

Students are frequently involved in faculty research through research assistantships, coursework, independent studies, and research centers housed at the School and throughout campus. The Harris School is home to the following research centers—the Center for Human Potential and Public Policy, the Cultural Policy Center, the Program on Political Institutions, the Urban Policy Initiatives, Energy Policy Institute of Chicago, Crime Lab—as well as the Pritzker Consortium on Early Childhood Development. The Center for Human Potential and Public Policy supports innovative social science research and encourages transdisciplinary research approaches on a broad range of issues, including health and well-being; science, technology, and inequality; and poverty and education. The Cultural Policy Center provides research and informs policy that affects the arts, humanities, and cultural heritage. It serves as an incubator for new ways of understanding what the arts and culture are, what they do, and how they can be affected by a range of policies in the public and private sectors. The Program on Political Institutions focuses on the domestic and international institutions that create and implement public policy. Through the support of workshops, conferences, student training,

and scholarship, it establishes an intellectual hub at the University for faculty and graduate students who are interested in the political economy of institutions. The Harris School is also home to Pritzker Consortium on Early Childhood Development, which brings together the world's leading experts to identify when and how child intervention programs can be most influential.

The interdisciplinary nature of the centers allows for broad participation by students and faculty. The School works closely with other research centers and programs throughout the University, including:

- Alfred P. Sloan Center on Parents, Children, and Work
- Center for Early Childhood Research
- Center for Health Administration Studies
- Center for Health and the Social Sciences
- Center for Human Potential and Public Policy (CHPPP)
- Center for Social Program Evaluation
- Center for the Study of Race, Politics, and Culture
- Center on Aging, Health and Society
- · Center on Demographics and Economics of Aging
- Chapin Hall Center for Children
- Crime Lab
- · Cultural Policy Center
- Energy Policy Institute at Chicago (EPIC)
- Institute of Politics
- NORC (formerly the National Opinion Research Center)
- Ogburn/Stouffer Center for the Study of Social Organizations
- The Paulson Institute
- Pritzker Consortium on Early Childhood Development
- Program on International Politics, Economics and Security (PIPES)
- Program on International Security Policy (PISP)
- Program on Political Institutions (PPI)
- Population Research Center
- Urban Policy Initiatives (UPI)

## STUDENT BODY

The Harris School is strongly committed to supporting a student body that includes diverse cultural and ethnic backgrounds, educational and work experiences, and professional training. The current student body is comprised of students who received undergraduate degrees in such fields as American studies, economics, education, engineering, English, environmental studies, international relations, philosophy, physics, political science, psychology, and sociology. The incoming class is 56 percent female and 47 percent international students, representing 25 countries. For the entire student body, students ages range

from 21 to 52 with approximately 300 master's students and 40 Ph.D. students enrolled.

Academic life is enriched by a variety of extracurricular activities and organizations. The Public Policy Student Association (PPSA), the Harris School student government, provides a voice for students and works with administrators at the Harris School on many issues and opportunities. Students may also participate in the Chicago Policy Review, the School's student-run academic journal; Chicago Environmental Policy Group (CEPA); the Minorities in Public Policy Studies (MIPPS); Community and Economic Development Organization (CEDO); Women in Public Policy (WIPP); Out in Public Policy (OIPP); the Committee on International Affairs and Public Policy (CIAPP); Harris Energy Association (HEA), International Security and Veterans Initiatives Group (ISAVI), Latin America(n) Matters (LAM); Education Policy Student Association (EPSA); Leaders in Child and Family Policy (LCFP), IBH Consulting; and other groups organized by Harris School students. In addition, Harris School students are able to take part in many University-sponsored activities, including intramural sports, University Theater, Chicago Maroon (the student-run newspaper), Chicago Debate Society, Minority Graduate Student Association, and Student Government.

## APPLICATION AND ADMISSION

We seek candidates with the academic preparation, intellectual ability, experience, and motivation to undertake a rigorous program in public policy studies, and who have the potential for academic and professional success. While no specific background or major is required or recommended, students with a strong liberal arts background and sound quantitative and analytical skills will be best prepared for the program. The Committee on Admission and Aid evaluates all official transcripts of academic work, personal essays, letters of recommendation, extracurricular activities and community service, performance on standardized tests, and special factors brought to its attention. The Committee considers each application on the basis of all materials submitted and does not eliminate applications based solely on grade point averages or test scores.

To be considered for admission, applicants must submit the following materials:

- Application for admission
- · Transcripts of all prior academic work at institutions of higher education
- Three letters of recommendation
- \$50 non-refundable application fee
- TOEFL scores (international applicants only use institution code 1849) or IETLS scores

Official GRE or GMAT scores, or LSAT scores (if a joint M.P.P./J.D. applicant). If submitting GRE or GMAT scores, use code 1849.

The Committee on Admission and Aid will not review your application until all required materials are received.

The Harris School currently accepts only electronic applications. For more information go to http://harrisschool.uchicago.edu/admissions-and-aid/

requirements-and-deadlines. Or, contact the Office of Admission at 773-702-8401 or Harris School @uchicago.edu for more information.



# THE SCHOOL OF SOCIAL SERVICE ADMINISTRATION

## MISSION

The School of Social Service Administration is dedicated to working toward a more just and humane society through research, teaching, and service to the community. As one of the oldest and most highly regarded graduate schools of social work, we prepare professionals to handle society's most difficult problems by developing new knowledge, promoting a deeper understanding of the causes and human costs of social inequities, and building bridges between rigorous research and the practice of helping individuals, families, and communities to achieve a better quality of life.

## PROFESSIONAL PURPOSE

Our educational program is grounded in the profession's history, purposes, and philosophy. Founded in 1908, the School of Social Service Administration (SSA) is one of a handful of institutions that has helped define the profession of social work and the field of social welfare. SSA's first leaders were activists in the Chicago settlement house movement, one of the main strands in what eventually became social work. Since its inception, while most early schools of social work concentrated on practical training for caseworkers, SSA's leaders insisted on the need for a solid foundation in social science and social research as well. In the decades since, the emphases on social research and on applying the insights of social science to solving human problems have continued. The School continues to establish the connections between the social and behavioral sciences, research, and the real world of policy and practice. SSA's interdisciplinary faculty is drawn from social work as well as from such related fields as economics, psychology, sociology, anthropology, political science, public policy, public health, and geography. Research at the School reflects this diversity and contributes to the development of social work knowledge.

The Master of Arts program, a two-year program that has been continuously accredited by the Council on Social Work Education and its predecessor organizations since 1919. SSA was recently reaccredited through June 2020. The School prepares students for advanced professional practice. Based on a body of knowledge, values, and skills of the profession, SSA's diverse course offerings provide students with a solid foundation in the profession and substantive exploration of two concentrations, clinical practice and social administration, the latter of which includes focused attention to non-profit management, community organization and development, and social policy. Quality instruction promotes the development of competent and effective professionals in these areas. Classes are intended to challenge and engage students in the dynamic interplay of theory, research, and practice. Students gain an understanding that whatever the focus of their practice, from the clinical micro-level to the policy macro-level, their activities

are guided by an appreciation of service in society and informed by a rigorous evidence and conceptual base.

Since 1920, our Doctoral Program has provided training for those interested in pursuing an academic career in social work and social welfare. SSA's doctoral graduates are leaders in the field of social work and social welfare scholarship. The program is designed to deepen students' mastery of both social science theory and research methods so that they are prepared to contribute to scholarly knowledge in innovative ways. The program accommodates students who are interested in developing and evaluating practice methods and interventions as well as those interested in understanding social problems and accompanying institutional and political responses. The diverse theoretical approaches of SSA's faculty make it uniquely positioned to support an interdisciplinary course of study.

## VALUES

SSA's educational program is informed by the values of the social work profession. As such, we prepare professionals who are committed to improving the lives of vulnerable and diverse populations and in promoting social and economic justice locally, nationally, and globally. Social work values ensure that service is driven by a humanistic perspective that values difference and asks us to consider the impact of our ideas and our work on the well-being of our clients, our colleagues, our agencies, and on society as a whole. Our values require that we treat others with dignity and respect and make human rights and social justice central to our work.

Our values require that we behave ethically in both our personal and professional lives. Our ethical precepts encompass such matters as treating our clients with dignity, honoring human diversity and differences, never exploiting clients for our own interests, and always acting in the best interest of clients. This is accomplished through human relationships, honoring the value of integrity, and preparing graduates with the competence to achieve professional goals of the highest quality. Similar precepts govern our relationships with other professionals. We recognize our responsibilities to the organizations for which we work, but also have the obligation to question policies and practices in the workplace that may not be aligned with the best interests of our clients. We value scientific inquiry and the use of scientific evidence, as well as the development and implementation of evidence-based policy and practice. Finally, our values require continued professional growth and development through lifelong learning.

## PROGRAM CONTEXT

## THE UNIVERSITY OF CHICAGO

Since its founding, the University's mission has been expressed in its motto, *Crescat scientia*; vita excolatur, "Let knowledge grow from more to more; and so be human life enriched." The University is committed to the development of new knowledge, both for its own sake and for the common good. The link of its mission to the mission and purpose of SSA is clear. As social problems become more complex, interconnected, and sprawling, the School of Social Service Administration is building upon its distinctive interdisciplinary and applied traditions to generate

more robust knowledge and to educate the most talented social work leaders, thereby achieving even greater social benefit, both locally and globally.

SSA's first dean, Edith Abbott, said in 1920 when SSA became a full-fledged professional school, that "only in a university, and only in a great university, could a school of social work get the educational facilities that advanced professional students must have if they were to become the efficient public servants of democracy." Our current President, Robert Zimmer, shares her sentiment and stated during his address during the 487th convocation, "The University of Chicago, from its very inception, has been driven by a singular focus on inquiry...with a firm belief in the value of open, rigorous, and intense inquiry and a common understanding that this must be the defining feature of this university. Everything about the University of Chicago that we recognize as distinctive flows from this commitment."

In his speech at the City Club of Chicago in April 2012, President Zimmer again emphasized the role of the University and SSA in generating knowledge for social benefit:

...since its earliest days, the University has strived to serve this city well. In fact, the University's first president, William Rainey Harper, saw service to the broader community as essential to the University's mission. To fulfill this mission, he established the Extension Division, which consisted of public lectures and correspondence courses, and the University Press, which dispersed University research to a wide audience. Both were revolutionary developments in American higher education. As Richard Storr wrote in his history of Harper's tenure as president, "The outward thrust of the University was both deliberate and continuous."

### Zimmer continued,

I could offer a great many examples of academic and research programs that illustrate Storr's link.... But I would like to turn briefly to the School of Social Service Administration, whose service to the community epitomizes that outward thrust at the same time as it underscores the university's singular focus on inquiry and belief in data-driven arguments and ideas.... One of the earliest schools of social work, SSA has its roots in the Chicago settlement house movement and is firmly tied to the history and institutions of this city. At its inception, its mission was to provide professional academic training to those serving the most vulnerable residents in the city's poorest neighborhoods.

Over the years, faculty members, administrators, and alumni have helped draft parts of the Social Security Act, have enforced child labor laws, and have fought for low-income working mothers. They have fostered the century-long partnership with Children's Memorial Hospital (now the Ann & Robert H. Lurie Children's Hospital of Chicago) and forged partnerships with over 700 agencies and programs throughout the city as part of their field placement program. They have moved from their professional training to leadership positions within social services agencies throughout the city and across the country, helping to shape the policies that transform lives. All the while, they have been focused on helping to find solutions for some of the most intractable problems of the city.

SSA is held to the highest of intellectual standards, and faculty recruitment and promotions are guided by rigorous expectations. Students take advantage of the opportunities available in the University and are able to make use of the rich course offerings of its other departments. In addition to taking courses at SSA from faculty trained across multiple disciplines, students take courses in the schools of law, business, medicine, divinity, public policy, and in departments of anthropology, sociology, psychology, psychiatry, and others. This is a university in which such a crosswalk between disciplines and departments is fluid, actively encouraged, and easily accomplished.

## CITY OF CHICAGO

As a great American city, Chicago and its surroundings provide a superb context for learning in the field. It is one of the nation's most diverse cities, a kaleidoscope of social and cultural traditions and populations. Chicago experiences all of the significant problems of the modern metropolis: poverty, violence, crime, dysfunctional schools, inadequate health services, drug use, family breakdown, social exclusion, and community disruption. There are both people with great progressive vision and forces that threaten to defeat them. Our students are able to witness, learn from, and contribute to this complex of activity.

Chicago has notably been at the forefront of pioneering movements in social work, community organizing, women's rights, urban planning and architecture, labor organizing, and African American politics. Building on this tradition, recent initiatives such as the University of Chicago Crime Lab, the Network for College Success, the Woodlawn Children's Promise Community, and the Chicago Center for Youth Violence Prevention (one of 6 national Academic Centers of Excellence funded by the Centers for Disease Control and Prevention)—all led or co-led by SSA faculty—yield both knowledge for the field at-large and tangible benefit to the citizens of Chicago while offering opportunities to expand the University's partnership with the city of Chicago. Our ever deepening partnerships with the neighbors in our community serve to enhance the quality of life and economic development of Chicago's South Side, the city of Chicago more broadly, and beyond to national and international levels. With this, SSA plays a very visible role in materially advancing the University's larger purpose to "enrich human lives."

### THE GLOBAL CONTEXT

As social problems become ever more globally interconnected, SSA has adopted a strategic commitment to and begun the deliberate implementation of a robust international social welfare program agenda. Our program presently includes a significant focus on international social welfare by integrating cross-national and comparative content into our curriculum, developing study-abroad and internship placement opportunities for students, organizing lectures by international scholars visiting Chicago, and promoting scholarly and student exchanges in partnership with peer institutions abroad. With support provided by the University's Provost's Office, SSA has undertaken a permanent expansion of its faculty ranks, with a strategic focus placed on bringing in faculty with explicit expertise in global and

international social welfare. Our first of several faculty hires in this emerging domain joined us in 2012-13; more are anticipated in the near future.

We run an annual, intensive, one-month study-abroad program on urban poverty and community practice for our master's students in collaboration with the Tata Institute of Social Sciences (TISS) in Mumbai, India, the oldest established school of social work in India. This program combines classroom instruction, field experience (with SSA students paired with TISS students in a small set of community placements), seminar discussion, and informal engagement with students and faculty from both schools. The program includes a reciprocal exchange in Chicago, in which TISS students engage in a parallel program to the one in India, strengthening comparative learning across institutions and countries and building meaningful peer relationships. This work has also begun to generate research collaboration among faculty at both institutions.

In China, SSA has established a relationship with colleagues at Peking University (PKU), the home to mainland China's oldest and most well-established social work program. We have hosted PKU faculty at Chicago on two separate occasions and have visited PKU to share insights and orientations to social work curriculum and field education as well as to explore common research interests. We are also partnering with PKU as part of the China Collaborative, an effort jointly sponsored by the Council of Social Work Education in the United States, China Association of Social Work Educators in China, and the International Association of Schools of Social Work to foster the advancement of social work education and the professionalization of social work in China during a time of rapid development. We are also launching an intensive Summer Institute in China in partnership with Hong Kong Polytechnic University which focuses on responses to social exclusion in Hong Kong, mainland China, and the United States. As with the TISS program, this exchange is designed to maximize interaction and learning between Chinese and American students through a range of formal curricular, field-oriented, and informal interactions, and to leverage the comparative perspective such an exchange might provide to think critically about social work practice and social welfare.

SSA, with our counterparts at Peking University, co-sponsored and hosted a scholarly seminar and strategic planning workshop in June 2012 with support from the University of Chicago's recently established Beijing Center. The seminar explored international perspectives on social policy and urban problems. The seminar brought together scholars from China, the United States, India, and South Korea to also explore knowledge about, policy responses to, and enduring questions focused on urbanization and globalization across particular substantive themes—education, health, children and youth, and poverty and development—as they are playing out across these four national contexts. Following the seminar, a strategic planning workshop was held to discuss the possibilities for both dyadic and multilateral exchanges and institutional relationships among participating institutions. The seminar and workshop were grounded in our developing relationship with PKU, and were expanded to include key relationships and potential partnerships with two other peer social work schools in other parts of Asia, the Tata Institute of Social Sciences in India and Seoul National University

in South Korea. A follow-up workshop is being planned in Seoul, South Korea, for March 2014.

In addition to these developing relationships, the presence of the University of Chicago's Beijing Center and the planned opening of the University's Center in Delhi open exciting opportunities to provide continued support for ongoing cross-national exchanges, seminars, and conferences, including hosting students and scholars from China, India, the United States, and other countries for varying periods of time.

## THE VISION

The forces shaping social welfare are varied and shifting and require the most intense scrutiny, cross-cutting and creative scholarship, and science that can anticipate and guide the future. Further, the field requires the most rigorously trained practitioners, policy makers, and future scholars to develop and apply complex and emerging knowledge for the profession so that social welfare strategies and interventions maximally benefit those most vulnerable and the wider society.

The School and its culture exhibit several hallmarks that distinguish us as one of the schools of social work leading the field into the future:

## 1. Interdisciplinary focus

Historically, SSA has been home to the most interdisciplinary cadre of social welfare scholars in the world. Building on this long-established tradition, SSA has recently established a formalized vehicle to encourage more integrated and robust evidence-based solutions to the most complex of social problems that overcome the strong centrifugal forces in the academic world that pull apart scholars who share similar substantive concerns, but whose work ends up funneled into disciplinary silos. SSA has recently established several formalized interdisciplinary scholar networks, organizing researchers from across disciplinary lines to collaborate in generating innovative and more comprehensive knowledge to tackle society's social problems. The scholar networks connect theory to practice in the highest intellectual tradition of the University, linking some of our most influential social welfare researchers with leading scholars and practitioners from around the nation. Initiated in 2011 and currently supported at SSA are the Employment Instability, Family Well-being, and Social Policy Network (EINet) and the STI and HIV Intervention Network (SHINE). The scholar network vehicle anchors such interdisciplinary research activities at SSA, and helps SSA to catalyze the development and translation of new high-impact scholarship so that it can more readily be put into practice—in the field and in the classroom.

## 2. Scholarship and research

Our faculty members are actively involved in cutting-edge scholarship and research that informs and shapes the field. The opportunities SSA faces require disciplined intellectual intensity to pursue ideas and the development of knowledge that challenge conventional ways of understanding social problems. We anticipate elevating further our intellectual leadership in the field through the recruitment of additional eminent scholars who will represent a rich mix of expertise and disciplinary diversity and whose ideas and intense inquiry will generate new understandings and effective responses to the most intractable social problems of

our times, whether these are growing poverty, violence, social displacement, or other conditions that place individuals at risk for multiple adversities.

In the classroom, SSA seeks students who are serious about learning, intensely curious, analytical, and imaginative, with a clear moral compass. As social work is a rewarding field that offers real-world opportunities for promoting social justice, alleviating and preventing human suffering, we challenge students to understand root causes and human costs of social problems, and think deeply to illuminate and implement effective, evidenced-based solutions. With a thorough grounding in practice and policy, coupled with analytical training to think at a complex level and solve problems, students carry out field placements in Chicago area not-forprofit organizations serving vulnerable populations, integrating the theories and techniques learned in the classroom with serving and doing in the field. The SSA faculty continuously work to achieve a deeper integration between these two centers of learning: knowledge generated by faculty scholarship and research presented to students in class, and field education where this knowledge is applied to reallife situations. These efforts provide a distinctive advantage to our students and a hallmark of SSA's intensive educational approach linking conceptual knowledge to learning, while students play a role in the delivery of social services and evaluating their impact.

### 3. Person-in-environment

The foundation of our curriculum is built on the assumption that all clinical social workers need to understand and appreciate the complexities of communities and organizational theory and practice, the policies that govern human services, and how to advocate for change in those systems. Similarly, students who are preparing for work at larger system levels need to know and understand the needs of those who seek our services; they also need to know how to assess, intervene, and evaluate those services. Our core curriculum gives equal weight to micro and macro practice, and the concentrations continue to be informed by issues at multi-system levels.

## 4. Developing skills in critical thinking

Effective and ethical practitioners must be skilled in raising questions about assertions made by theoreticians, researchers, supervisors, and colleagues. They must be able to analyze the purported rationale behind those assertions and assess the nature of evidence supporting them. We strive to produce professionals who engage in empirically-based practice and who understand the importance of garnering rigorous evidence that informs practice.

## 5. Chicago as the context for field work and other learning opportunities

Solving social problems requires not only conceptual clarity but also a deep real-world engagement in understanding and responding to such problems. Historically, SSA has played a lead role in tangibly advancing policies and practices serving vulnerable children and families, immigrants, the homeless, and those imprisoned or struggling with substance abuses. We have ongoing institutional partnerships with over 700 human service agencies, philanthropies, and government bodies in and around Chicago addressing those facing such deep problems. Indeed, many of our graduates serve as executives for the lead agencies in the community. Through

our fieldwork partnerships in the community, our students each year provide more than a quarter million hours of direct service to the citizens of Chicago.

## GOALS OF THE SCHOOL

Carrying out SSA's mission to enrich human life through scholarship, education, and service dedicated toward advancing a more socially just and humane society, we tackle the most intractable and costly of social problems by developing knowledge and rigorously trained professionals and by leading and informing the field in ways that advance our society and the concerns of those who are most vulnerable. In keeping with its mission, the School's goals are to:

- educate competent and effective professionals able to apply clinical, analytical, and organizational knowledge and skills to solve social problems and relieve the distress of vulnerable individuals through ethical practice in a rapidly changing global environment. This requires a learning environment that models respect for diversity and lifelong learners who can think critically about the world around them;
- produce scholarship which enhances our understanding of the nature and sources
  of problems of individuals, families, communities, and society and of effective
  means of preventing and intervening with those problems; and
- use the School's resources to advance social justice and to serve its immediate community and the field of social welfare through the translation of knowledge into action. We aim to provide leadership both institutionally and through the efforts of individual faculty.

Graduates of the School of Social Service Administration should be able to:

- understand that the foundation of effective service lies in a grasp of the personin-environment. Individual distress occurs in a social context involving the interaction of biological, psychological, familial, economic, community, and cultural factors;
- understand that theories supported by empirical evidence serve as conceptual
  frameworks for examining individual distress, organizational functioning,
  community contexts, and social policies. These theories are drawn from multiple
  disciplines and become the foundation for a coherent framework from which to
  respond to human needs and promote social justice;
- think critically and challenge the underlying assumptions, core values, conceptual frameworks, and evidence on which our professional knowledge is based;
- engage in competent, ethical, and effective clinical social work clinical practice or social administration; and
- become effective leaders in the fields of social work and social welfare.



## SSA RESEARCH CENTERS

## CENTER FOR HEALTH ADMINISTRATION STUDIES

The Center for Health Administration Studies (CHAS) focuses on health services and health policy research with a particular emphasis on policy and services for disadvantaged and vulnerable populations. The Center focuses on interdisciplinary and translational research that integrates health and social service delivery that contributes directly to improved population health. CHAS is an endowed University of Chicago center established in 1962 to promote active interdisciplinary collaboration among scientists both within the University of Chicago and among national and international networks of health services and policy researchers.

The Center also supports an innovative health policy and research training program for graduate professional students at the University of Chicago, the Graduate Program in Health Administration and Policy (GPHAP) (http://www.ssa.uchicago.edu/gphap). GPHAP is unique among health administration programs in the United States. GPHAP allows students to earn either a Certificate in Health Administration and Policy (http://www.ssa.uchicago.edu/gphap-program-requirements) or a Certificate in Health Administration and Policy with a Concentration in Global Health (http://www.ssa.uchicago.edu/global-health-certificate-program), while earning a degree in one of the participating graduate schools on campus: the Booth School of Business (http://www.chicagobooth.edu), the Harris School of Public Policy (http://harrisschool.uchicago.edu), the Law School (http://www.law.uchicago.edu), the Pritzker School of Medicine (http://pritzker.uchicago.edu), and the School of Social Service Administration (http://www.ssa.uchicago.edu).

The Center is located within the University of Chicago School of Social Service Administration (SSA). CHAS was established at the University of Chicago in 1962 and celebrated its 50th anniversary in 2013.

## CHAPIN HALL AT THE UNIVERSITY OF CHICAGO

SSA partners with Chapin Hall at the University of Chicago, an independent entity. Chapin Hall has, since its inception in 1985 as a research and policy center, focused on a mission of improving the well-being of children and youth, families, and their communities. This mission is achieved through policy research—by developing and testing new ideas, generating and analyzing information, and examining policies, programs, and practices across a wide range of service systems and organizations. Chapin Hall's researchers meet regularly with policy makers, agency directors, philanthropic organizations, and community groups to assure that important findings are placed directly in the hands of those who can best use them.

A number of faculty members from the School of Social Service Administration are partners with Chapin Hall and direct research under its auspices. SSA doctoral and master's-level students form an integral part of many Chapin Hall research teams and are active participants in seminars and discussions. Please refer to

the Chapin Hall website for more information about the organization's research, publications, and conferences: http://www.chapinhall.org/.

## CHICAGO CENTER FOR YOUTH VIOLENCE PREVENTION

The Chicago Center for Youth Violence Prevention (CCYVP) brings together researchers, community representatives, practitioners, and policy makers committed to understanding and reducing youth violence in poor, inner-city communities in Chicago—communities with some of the highest rates of youth violence in the country. The core work of the center is guided by the perspective that the most effective way to combat youth violence is to coordinate empirical "pre-intervention" work designed to understand the risk and development of such violence and to rigorously evaluate preventive interventions conducted both under tightly controlled conditions (i.e., randomized control efficacy trials) and in real-world settings (i.e., effectiveness trials). Central to the work of CCYVP is gaining an understanding of the characteristics of communities and neighborhoods that serve as risk and protective factors for youth development. This knowledge helps to identify ways to reduce the risk of youth violence and develop effective interventions.

CCYVP's primary aims are to build an integrative approach to address youth violence within specific communities in Chicago. The center will address these issues across developmental periods and with children and families with different levels of risk and involvement in youth violence; promote the use of evidence-based practice to reduce youth violence; develop a comprehensive surveillance system to guide intervention activities and to evaluate changes in youth violence in communities and neighborhoods; provide training and technical assistance to support schools and community agencies in selecting, implementing, and evaluating youth violence prevention programs; train new investigators in context-based prevention science; and disseminate empirical findings regionally and nationally.

## CRIME LAB

The University of Chicago Crime Lab (http://crimelab.uchicago.edu) seeks to improve our understanding of how to reduce crime and violence by helping government agencies and non-profit organizations rigorously evaluate new pilot programs. The Crime Lab began in April 2008 in partnership with the City of Chicago, and its work has been made possible by generous seed funding from the Joyce Foundation, the University of Chicago Office of the Provost, and the School of Social Service Administration through the Center for Health Administration Studies.

## Interdisciplinary Scholar Networks

SSA launched the Interdisciplinary Scholar Network initiative to bring together scholars across disciplinary and professional lines and to generate innovative and more comprehensive knowledge aimed at addressing some of society's most intractable social problems. Two networks have been established:

- Associate Professor Susan Lambert and Assistant Professor Heather Hill created
  the Employment Instability, Family Well-being and Social Policy Network (http://
  ssascholars.uchicago.edu/einet) (EINet). This research network will enhance the
  capacity of the field to study employment instability at the lower end of the labor
  market and to develop and evaluate interventions aimed at reducing employment
  instability and its effects on children and families.
- Professor Dexter Voisin and Assistant Professor Alida Bouris created the STI and HIV Intervention Network (http://ssascholars.uchicago.edu/shine) (SHINE) to conduct research on the biological, behavioral, and structural factors that heighten vulnerability to sexually transmitted infections and HIV among ethnic minority communities in the United States. SHINE will develop and evaluate interventions to alleviate existing STI/HIV disparities.

## Information and Application

For further information and application materials, contact the Office of Admissions, The School of Social Service Administration, 969 East 60th Street, Chicago, IL 60637; telephone: (773) 702-1492 or by visiting the SSA website at http://www.ssa.uchicago.edu.



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