PROPOSED NEW COURSES
ARTS & SCIENCES FACULTY MEETING
October 17, 2012

Graduate Academic Affairs Committee

GRS BI 697 & GRS MB 697: A Bridge to Knowledge: A Practical Seminar for First-Year Graduate Students in Biology
Instructor: Kathryn Spilios
1 credit
Prerequisites: first-year MA or PhD students in Biology or MCBB, or first-time teaching fellows in Biology or MCBB

A seminar for first-year biology and MCBB graduate students. Basic pedagogical theory and professional development topics are covered. The course is intended to help students become effective teachers and members of the graduate community.

GRS WS 801: Theories and Methods in Women’s, Gender, & Sexuality Studies
Instructor: Carrie Preston and other WGS faculty
4 credits
Prerequisites: none

Exploring the variety of theories and methods in the interdisciplinary fields of women’s, gender, and sexuality studies, this seminar is required for the WGS Graduate Certificate. Readings from the humanities, social sciences, and natural sciences address questions of identity and epistemology.

Humanities Curriculum Committee

CAS AH 587: Green Design
Instructor: Keith N. Morgan
4 credits
Prerequisites: junior, senior, or graduate standing

This seminar explores the historical context for issues of sustainability and green architecture from the eighteenth century to the present, charted through questions of landscape theory, public park making, suburbanization, adaptive re-use, and new materials and methods of construction.

CAS CL 306: Entheogens, Myth, and Human Consciousness
Instructor: Carl Ruck
4 credits
Prerequisites: CAS CL 213 or consent of instructor

An examination of the role of entheogens (psychoactive substances, especially fungi, used for religious purposes) in humankind's attempts to understand realms beyond the physical, as reflected in Greco-Roman religions and in various mythologies and folklores, and as represented in art and literature from antiquity through the Renaissance.
CAS LH 340: Israeli Culture through Media  
Instructor: Hebrew Staff  
4 credits  
Prerequisites: CAS LH 212 or equivalent  
An advanced Hebrew language course, which uses as its “textbook” Israeli newspapers, television, and online news media. Students follow current events in Israel (politics, business, sports, etc.); compare coverage in diverse outlets; speak and write knowledgeably about Israeli society.

CAS ME 101: Issues in Middle East Studies  
Instructor: Director of Middle East Studies Program  
1 credit  
Prerequisites: enrollment in the Middle East Studies major  
Mini-seminar to analyze and integrate students’ coursework for the Middle East Studies major. Student presentations on relevant outside coursework, reading of foundational short works to introduce competing approaches to Middle East studies. Required of all Middle East Studies majors.

CAS PH 439 / GRS PH 639: Philosophy of Emotion  
Instructor: Charles Griswold  
4 credits  
Prerequisites for CAS PH 439: junior or senior standing and three philosophy courses  
Addresses questions about the nature of the emotions, including their cognitive dimensions; the distinction between moods, feelings, and emotions; their cultural variation; and their relation to reason, ethics, and to the pursuit of the good life. Cannot be taken for credit in addition to the course by the same name that is numbered CAS PH 239.

CAS RN 208: Sacred and Secular Power in Christianity and Islam  
Instructor: Phillip Haberkern  
4 credits  
Prerequisites: none  
Explores the relationship between sacred and secular power within the Christian and Islamic traditions, with a focus on how their foundational texts and earliest communities established models for negotiating the porous boundary between the sacred and the secular. Also offered as CAS HI 213.

CAS RN 209: Religion, Health, and Medicine  
Instructor: Anthony Petro  
4 credits  
Prerequisites: none  
How religious and moral narratives inform approaches to biomedicine from the nineteenth century to the present, including understandings of disease, illness, health, sexuality, and the body. Topics include medicine and prayer, alternative medicine, and boundaries between medicine and religion.
CAS RN 327 E: Jews and Christians in Italy: A Historical Perspective  
Instructor: Gadi Luzzatto Voghera  
4 credits  
Prerequisites: enrollment in the Padua Language & Liberal Arts Program  
A social history of the relationship between the Jewish and Christian communities in Italy, from early modern times to today. Fosters an understanding of this relationship in cultural, economic, social, and religious contexts. Includes site visits. Taught in Italian.

CAS RN 390 / GRS RN 690: Archaeology in the Holy Land  
Instructor: Andrea M. Berlin  
4 credits  
Prerequisites for RN 390: sophomore, junior, or senior standing  
In Israel, archaeology is part of current events. The study of remains from the Israelite to the Muslim conquests (c. 1200 BCE – 640 CE) to learn how material evidence created and still plays a role in a larger historical drama. Also offered as CAS AR 342 / GRS AR 742.

**Natural Sciences Curriculum Committee**

**Proposed new courses**

CAS CH 303: Instrumental Analysis Laboratory  
Instructor: Rosina Georgiadis  
4 credits  
Prerequisites: CAS CH 109/CH 110, or CH 111/CH 112, or CH 101/CH 102/CH 201; and CAS MA 124  
Corequisite: CAS PY 212  
Principles and application of modern analytical methods including spectrophotometry, electrochemistry, mass spectrometry, GCMS, UPLC, AAS, DSC with emphasis on good laboratory practices, advanced data analysis software, statistics, regression, report writing. Six hours lab and two hours lecture.

CAS NE 444: Neuroethology  
Instructor: Tim Gardner and Mario Muscedere  
4 credits  
Prerequisites: CAS BI 325 or NE 203, or consent of instructor.

Specialized natural behaviors reveal general principles of systems neuroscience. Examples include vocal learning in songbirds, sensory-motor integration in bats, and pattern generators in lobsters. Three hours lecture and literature discussion; three hours laboratory, including microchip programming and neural recordings. Also offered as CAS BI 444.

GRS PY 745: Experimental Surface Physics and Chemistry  
Instructor: Kevin Smith  
4 credits  
Prerequisites: CAS PY 543 or consent of instructor  
Introduction to the principles and experimental techniques of surface and interface physics and chemistry. Electronic, structural, vibrational, and magnetic properties of solid surfaces and interfaces. Emphasis on how these properties are measured. Also vacuum technology and x-ray generation.
**Social Sciences Curriculum Committee**

**Proposed new courses**

CAS AR 201: Americas Before Columbus  
Instructor: David Carballo, Michael Danti, William Saturno  
4 credits  
Prerequisites: none

An introduction to the archaeology and civilizations of the pre-Columbian Americas. Topics progress chronologically as well as comparatively, with cases drawn from Native American cultures of the North America, Mesoamerica, and South America.

CAS AR 510: Proposal Writing for Social Science Research  
Instructor: John Marston  
4 credits  
Prerequisites for undergraduate students: admission to AR or AN Honors Program or advanced undergraduate standing with consent of instructor  
Prerequisites for graduate students: graduate student standing in the social sciences or humanities

The purpose of this course is to turn students’ intellectual interests into answerable, field-based research questions. The goal is the production of a project proposal for future research. Also offered as CAS AN 510.

CAS GE 560: Energy Transitions  
Instructor: Cutler Cleveland  
4 credits  
Prerequisites: CAS GE 309 (can be taken concurrently) or graduate standing

Survey of energy transitions including animal power to wood to coal to petroleum to electricity; analysis of socioeconomic, political, technological, and environmental causes of energy transitions and future energy transitions resulting from fossil fuel depletion, climate change, and sustainable development.

CAS HI 213: Sacred and Secular Power in Christianity and Islam  
Instructor: Phillip Haberkern  
4 credits  
Prerequisites: none

Explores the relationship between sacred and secular power within the Christian and Islamic traditions, with a focus on how their foundational texts and earliest communities established models for negotiating the porous boundary between the sacred and the secular. Also offered as CAS RN 208.

CAS IR 505: Arms Control and Proliferation of Weapons  
Instructor: Paul Hare  
4 credits  
Prerequisites: none

Instructor: Jennifer Bender
4 credits
Prerequisites: enrollment in Marine Semester

This course addresses how scientists can target their research toward policy needs and then effectively communicate to the public and policy makers so that science might inform public policy. Taught during the Marine Semester.

CAS PO 542: Immigration: Politics and Policy
Instructor: Sofia Perez
4 credits
Prerequisites: junior standing or consent of instructor

Immigration has become a subject of much debate and controversy in democratic polities. This course explores the politics, economics, and social consequences of immigration policies across a number of countries, including European states and the United States.

CAS PS 550: Childhood Adversity: Risk and Resilience
Instructor: Amanda Tarullo (Carrillo)
4 credits
Prerequisites: CAS PS 241 or PS 243

Consideration of why some children overcome adversity while others have maladaptive outcomes. Concepts of risk and resilience are applied to contexts of childhood adversity: poverty, maltreatment, homelessness, orphanages, and natural disasters. Discussion of implications for prevention, intervention, and policy.

CAS SO 243: Immigrant Communities
Instructor: David Carballo, Michael Danti, William Saturno
4 credits
Prerequisites: none

Introduction to sociology of immigrant communities with a focus on the contemporary US. Students gain an understanding of how immigrant communities develop, the different forms they take, and how the shape the social and economic adaptations of varied immigrant groups.