Big Problems

Executive Director: Margot Browning, JRL S102, 702-5657, m-browning@uchicago.edu

The Big Problems courses that follow are among a growing number of capstone experiences offered as electives to fourth-year students in the College. Under special circumstances involving senior project needs, third-year students may petition for permission to register for a Big Problems course.

"Big problems" are characteristically matters of global or universal concern that intersect with several disciplines and affect a variety of interest groups. They are problems for which solutions are crucially important but not obviously available.

Big Problems courses emphasize process as well as content: learning how to creatively confront difficult intellectual and pragmatic problems wider than one's area or expertise and to consider how to deal with the uncertainty that results. This often points to the importance of working in groups. If the core curriculum provides a basis for learning and the majors develop more specialized knowledge, the Big Problems experience leads to the development of skills for thinking about and dealing with the important but unyielding issues of our time.

Big Problems courses encourage linkage to B.A. papers, research experiences, or internships. They use interdisciplinary team teaching, seeking to cross disciplines and divisions and to transcend familiar models of content, organization, and instruction.

Each year a Big Problems Lecture Series features outside speakers and additional workshops for interested students.

Courses: Big Problems (BPRO)

22200. Boundaries, Modules, and Levels. (=HIPS 20601, PHIL 22210) *PQ: Third- or fourth-year standing.* This course investigates conceptual problems arising in the attempt to analyze the structure of complex systems in a variety of biological, psychological, social, and technological contexts, and how the answers may vary with how the boundaries are drawn. We confront descriptive, critical, and normative puzzles arising from questions such as the following: Is a society just a collection of people, an organized collection of people, or something more? Can a corporation have rights and responsibilities? Can groups have identities? Why are minds in the head, or are they? And are genes the bearers of heredity? *W. Wimsatt, J. Haugeland. May be offered 2008–09; not offered 2007–08.*

22300. Empire. (=CLCV 28707, HUMA 22303, ISHU 22303) PQ: Thirdor fourth-year standing. Completion of the general education requirement in civilization studies requirement through a College-sponsored study abroad program. Students read a variety of texts (e.g., writings of Thucydides, Vergil, and Forster; documents from the caliphate of Andalusia; current articles). By viewing their own experiences in the light of Arab, British, Greek, and Roman empires, students reflect on America's role in the cultures and countries of the twenty-first century. Economics, language, culture, ecology, and social ethics may provide the lenses through which students view and review their experiences. *M. L. Behnke, C. King. Autumn.*

22500. Medicine and Society: Things, Bodies, and Persons. (=BIOS 29310, HIPS 22501, PHIL 22501) *PQ: Third- or fourth-year standing. This course does not meet requirements for the biological sciences major.* This course explores ethically controversial topics in contemporary medicine (e.g., abortion, the right to die, genetic enhancement, role of religion in medicine). The course is team taught by faculty from medicine and philosophy. For each topic, we discuss current dilemmas that arise in clinical medicine and elucidate the moral basis for different responses to the dilemmas. *D. Brudney, J. Lantos, A. Winter. May be offered 2008–09; not offered 2007–08.*

22600. Autonomy and Medical Paternalism. (=BIOS 29311, HIPS 21901, HIST 25102, PHIL 22601) *PQ: Third- or fourth-year standing. This course does not meet requirements for the biological sciences major.* This course is an in-depth analysis of what we mean by autonomy and how that meaning might be changed in a medical context. In particular, we focus on the potential compromises created by serious illness in a person with decision-making capacity and the peculiar transformations in the meaning of autonomy created by advance directives and substituted judgment. *D. Brudney, Staff. Winter.*

23400. Is Development Sustainable? (=ENST 24400, HIPS 23400, PBPL 24400) *PQ: Third- or fourth-year standing.* This is a discussion course for students without a background in environmental issues. Its aim is to grapple with the "big problem" of sustainable development. We analyze problematical issues underlying population growth, resource use, environmental transformation, and the plight of developing nations through a consideration of economic, political, scientific, and cultural institutions and processes. *T. Steck, S. Pieck. Spring.*

23500. The Organization of Knowledge. (=HIPS 23000, HUMA 23502, ISHU 23502) *PQ: Third- or fourth-year standing.* This course explores several structures of knowledge that students may have encountered in their core and specialized education, with the goal of enabling students to identify and explore the implications of these different structures. We ask whether all knowledge is relative, and if so, to what? When things are structured differently, does that mean that knowledge is lost? Or are there several diverse ways of structuring knowledge, each of which may be viable? We read a wide range of classical and modern thinkers in various disciplines. *H. Sinaiko, W. Sterner. May be offered 2008–09; not offered 2007–08.*

23600. Social Context, Biology, and Health. *PQ: Third- or fourth-year standing.* We take for granted our relationships with other people as fundamental. Yet when these connections are absent or disrupted, our minds and biology are likewise disrupted. Epidemiological studies have now clearly established a relationship between social isolation and both mental and physical health. This course adopts an integrative interdisciplinary approach that spans the biological to sociological levels of analysis to explore the interactions involved and possible mechanisms by which the social world gets under the skin to affect the mind, brain, biology, and health. *J. Cacioppo, M. McClintock, L. Waite. Not offered 2007–08.*

23900. Biological and Cultural Evolution. (=BIOS 29286, CHSS 37900, HIPS 23900, LING 11100, PHIL 22500/32500) *PQ: Third- or fourth-year standing or consent of instructor required; core background in evolution and genetics strongly recommended.* This course draws on readings in and case studies of language evolution, biological evolution, cognitive development and scaffolding, processes of socialization and formation of groups and institutions, and the history and philosophy of science and technology. We seek primarily to elaborate theory to understand and model processes of cultural evolution, while exploring analogies, differences, and relations to biological evolution. This has been a highly contentious area, and we examine why. We seek to evaluate what such a theory could reasonably cover and what it cannot. *W. Wimsatt, S. Mufwene. Autumn.*

24100. Science and Religion. (=HIPS 24200) *PQ: Third- or fourth-year standing.* In this course, we explore some aspects of the relations between science and religion in Western culture (e.g., Christian, Jewish, Islamic). Questions include: What are science and religion? Are they competing intellectual systems for making sense of the world? What are social institutions? Can they be in conflict with one another? Can they support one another? Each of the instructors treats these questions by examining certain historical episodes and texts to add different perspectives to the material. *R. Perlman. Not offered 2007–08.*

24150. Romantic Love: Cultural, Philosophical, and Psychological Aspects. (=CHDV 24150, HUMA 24150, ISHU 24150) *PQ: Third- or fourth-year standing. This course carries double credit.* This course combines humanistic and social scientific disciplines to examine the phenomenon of romantic love—a "big problem" in practical, theoretical, and cultural senses. We start by comparing representations of romantic love experiences in visual, musical and literary arts and myths. After exploring what may be specific to this form of love, we address two further issues: the role and sources of non-rational experience in romantic love, and the role of romantic love in modern marriage. Illumination of these topics is sought through the discussion of humanistic and social scientific texts and cinematic presentations. *The class meets for six hours a week. D. Orlinsky, K. Mitova. Spring.*

24200. Psychoneuroimmunology: Links between the Nervous and Immune Systems. (=BIOS 02370, PSYC 24150/44140) PQ: Third- or fourth-year standing, and BIOS 20180s or 20190s. This course meets requirements for the biological

sciences major. This course covers all aspects of neuroimmunoendocrinology at the molecular, cellular, and organismal and social levels. *M. McClintock, J. Quintans. May be offered 2008–09; not offered 2007–08.*

24300. Globalization and Neo-Liberalism. (=INST 24300) PQ: Third- or fourth-year standing. Developments over the past decade have led a number of former leading enthusiasts of globalization to raise basic criticisms of the neo-liberal paradigm. In doing this, they have echoed and drawn attention to the results of economists and historians whose work undercuts the basic premises of neo-liberalism. This course explicates a varied collection of this work, viewed as a critique and alternative to neo-liberalism, by economic historians (e.g., Hobsbawn, Williams, Arrighi, Polanyi) and economists (e.g., Palley, Taylor, Stretton, Marglin, Eatwell, MacEwan, Blecker, Brenner). M. Rothenberg, R. Baiman. Not offered 2007–08.

24400. Concepts of the Self from Antiquity to the Present. PQ: Third- or fourth-year standing. This seminar explores the evolution of ideas about the nature and formation of selfhood from classical antiquity to the present. Along the way, we look at Greek tragedy, Stoic philosophy, early Christian texts, and the conceptual models of selfhood and self-understanding behind Descartes, Kant, Freud, Foucault, and others. Students should be prepared to deal extensively with scholarship on self, ethics, and community across the fields of philosophy, anthropology, psychology, and social history. S. Bartsch, J. Goldstein. Not offered 2007–08.

24500. Language and Globalization. (=ANTH 27705/47905, CRPC 27500/37500, LING 27500/37500) *PQ: Third- or fourth-year standing.* Distinguishing myths from facts, this course articulates the different meanings of *globalization*, anchors them in a long history of socioeconomic colonization, and highlights the specific ways in which the phenomena it names have affected the structures and vitalities of languages around the world. We learn about the dynamics of population contact and their impact on the evolution of languages. *S. Mufwene, W. Wimsatt. May be offered 2008–09; not offered 2007–08.*

24600. Moments in Atheism. *PQ: Third- or fourth-year standing.* Atheism is as old as religion. As religion and its place in society have evolved throughout history, so has the standing and philosophical justification for non-belief. This course examines the intellectual and cultural history of atheism in Western thought from antiquity to the present. We are concerned with the evolution of arguments for a non-religious worldview, as well as with the attitude of society toward atheism and atheists. *S. Bartch. May be offered 2008–09; not offered 2007–08.*

24700. From Neo-Liberalism to Neo-Imperialism. (=INST 24700) PQ: Thirdor fourth-year standing. This course examines the thesis advanced by a number of recent thinkers on the organic ties between neo-liberal doctrine and the rise of a new imperialism. In *False Dawn*, the noted conservative political theorist John Gray gives a critique of the global free market. In *Capital Resurgent: Roots of the* *Neoliberal Revolution*, two important left critics, economists Gerard Dumenil and Dominique Levy, investigate the economic roots of neo-liberalism. Finally, in reading two recent works by the economic geographer David Harvey (A Brief History of Neo-Liberalism and The New Imperialism) we consider in depth the link between neo-liberalism and imperialism. M. Rothenberg, R. Baiman. Spring.

24800. The Complex Problem of World Hunger. (=BIOS 02810, ENST 24800, SOSC 26900) *PQ: Third- or fourth-year standing.* Few of our policymakers are experts in economics, agronomy, food science, and molecular biology, yet all of these disciplines are essential for developing strategies to end world hunger. Choosing one country as a test case, we look at the history, politics, governmental structure, population demographics, and agricultural challenges. We then study the theory of world markets, global trade, and microeconomics of developing nations, as well as the promise and limitation of traditional breeding and biotechnology. *J. Malamy. Not offered 2007–08.*

24900. Biology and Sociology of AIDS. (=BIOS 02490) *PQ: Third- or fourthyear standing.* This interdisciplinary course deals with current issues of the AIDS epidemic. Readings are based primarily on *AIDS Update 2006. J. Quintans, H. Pollack. Winter.*

25000. Images of Time: Japanese History through Film. (=CMST 24906, EALC 24601, HIST 24603) *PQ: Third- or fourth-year standing required; knowledge of Japanese not required.* Focusing attention on the emerging nexus between audio-visual media and historical studies, this course deals with theories of time, history, and representation while making those ideas and problems concrete through a study of the way in which history in Japan has been mediated by the cinema. A close reading of a wide range of films produced in and about Japan in tandem with primary and secondary materials on theories of time, images, and national history highlights the historicity and history of both film and Japan. All materials in English. *J. Ketelaar, M. Raine. May be offered 2008–09; not offered 2007–08.*

25100. Evolutionary Theory and Its Role in the Human Sciences. (=HIPS 25801, HIST 25004, PHIL 25100) *PQ: Third- or fourth-year standing.* The course's aim is two-fold: (1) an examination of the origins and development of Darwin's theory from the early nineteenth century to the present; and (2) a selective investigation of the ways various disciplines of the human sciences (i.e., sociology, psychology, anthropology, ethics, politics, economics) have used evolutionary ideas. *R. Richards, N. Beck. Winter.*

25200. Body and Soul: Approaches to Prayer. (=CHDV 25200, RLST 28800) *PQ: Third- or fourth-year standing.* Why do we pray? Why do we experience prayer practice as reaching out towards an intentional being whom we cannot (except in representation) touch, see, or hear? This course approaches an answer to that question by looking at the way we pray, particularly in a Christian context. What kinds of bodily engagement do we find in prayer; what impact might prayer practice have upon our bodies; what bodily features of prayer might help

to explain why its practice has been so compelling to so many for so many years? *A. Boden. May be offered 2008–09; not offered 2007–08.*

25300. Utopias. (=ARTH 22804, ENGL 25302, HUMA 25350, ISHU 25350) *PQ: Third- or fourth-year standing.* This course surveys significant moments in utopian practice, choosing case studies from among Plato's *Republic*, Sir Thomas More's *Utopia*, national experiments, utopian communities, socialism, technophily, new social movements, radical conservatism, and fundamentalisms. We focus on literature and art, including music, painting, architecture and urbanism, and film and digital media. *L. Berlant, R. Zorach. Not offered 2007–08.*

26050. Memory, Commemoration, and Mourning. (=AASR 30001, CHDV 27102, FNDL 23312, PSYC 25450, RLST 28102) *PQ: Third- or fourth-year standing.* This course focuses on the manner in which we make use of the past, the personal past, the collective past, and the place of social and historical change in retelling and rewriting life-history and history. The course begins with a discussion of memory, conceptions of the personal and historic past, and such related issues as nostalgia, mourning, and the significance of commemoration in monument and ritual. These issues are explored in a number of topics such as twentieth-century war memorials, high school and college reunions, and the Holocaust and its representation in contemporary European society. *B. Cohler, P. Homans. May be offered 2008–09; not offered 2007–08.*

26102. War. PQ: Third- or fourth-year standing. In this course, we ask such questions as: Why do humans go to war? What is the experience of war like? How does war affect the individual and his society? What is a just war? An unjust war? Can we conceive of a world without war? We read and discuss texts such as Homer's The Iliad, Thucydides' History of the Peloponnesian War, Tolstoy's War and Peace, Jonathan Shay's Achilles in Vietnam, and Glen Gray's The Warriors. The readings serve primarily as a starting point for the discussion of the above questions and any other issues raised by the class that are related to war. M. Ehre, H. Sinaiko. Not offered 2007–08.

26200. Military Theory and Practice. *PQ: Third- or fourth-year standing.* (=ANTH 23400/32500) This course introduces classic military theories (i.e., Ibn Khaldun, Machiavelli, Clausewitz, Upton, Lyautey, Mahan, Keegan) and their deployments. It also considers the impact of new technologies on conditions of possibility for coercion. Particular attention is given to anti-colonial and counter-insurgency campaign strategies (i.e., Gandhi, Fanon, Truman, Rostow) and the rise and style of American power, including new concepts and practices of military intervention (e.g., "compellance" theory) being developed in the contemporary United States. *J. Kelly. Not offered 2007–08.*

26300. Globalization: History and Theory. (=HIST 29901, INST 27201) *PQ: Third- or fourth-year standing.* This course makes sense of globalization as a historical phenomenon focusing primarily on the long twentieth century, but with a look back into the "deep history" of the making of the contemporary world. While the course has a theoretical bent, it should be taken as an introduction into

modern history. It has three goals in particular: (1) It introduces the main concepts and theories of globalization. (2) It explores key moments, processes, and events in the annals of globalization. (3) It highlights the nature of contentions over the terms of global order. *M. Geyer, C. Bright. Spring. Not offered 2007–08.*

26600. Antonioni's Films: Reality and Ambiguity. (=ARTH 28904, CMST 26801, ISHU 26602) *PQ: Third- or fourth-year standing.* In this in-depth study of several Antonioni films, our eye is on understanding his view of reality and the elements of ambiguity that pervade all of his films. Together, as a film scholar and physicist, we bring out these aspects of his work together with his unique cinematic contributions. This course introduces students to this poet of the cinema and the relevance of Antonioni's themes to their own studies and their own lives. *Y. Tsivian, B. Winstein. May be offered 2008–09; not offered 2007–08.*

27000. Perspectives on Imaging. (=ARTH 26900/36900, BIOS 02927, CMST 27300/37300, HIPS 24801) *PQ: Third- or fourth-year standing. This course does not meet requirements for the biological sciences major.* Taught by an imaging scientist and an art historian, this course explores scientific, artistic, and cultural aspects of imaging from the earliest attempts to enhance and capture visual stimuli through the emergence of virtual reality systems in the late twentieth century. Topics include the development of early optical instruments (e.g., microscopes, telescopes), the invention of linear perspective, the discovery of means to visualize the invisible within the body, and the recent emergence of new media. We also consider the problem of instrumentally mediated seeing in the arts and sciences and its social implications for our image-saturated contemporary world. *P. La Riviere. May be offered 2008–09; not offered 2007–08.*

27600. Creation and Creativity. (=ANTH 27610, ISHU 27650, SOSC 28601) *PQ: Third- or fourth-year standing.* This seminar explores several creation stories from anthropological, literary, philosophical, and psychological perspectives. We compare the accounts of the beginning in *Genesis*, Hesiod's *Theogony*, Ovid's *Metamorphoses, Bhagavad Gita*, the Maya's *Popol Vuh*, and other sources, including Native American ones. We explore the ways cosmic creation has been imagined in world culture. We also delineate human literary creativity and ask about the relationship between individual creativity and the cultural myths of creation. We consider at least one modern theory of the beginning of the universe. *P. Friedrich, K. Mitova. Spring.*

28000. Terror, Religion, and Aesthetics. (=HMRT 28801, ISHU 28201, RLST 23401) *PQ: Third- or fourth-year standing.* Through our contemporary experiences of terrorist acts, we apprehend the no-citizens' land of life without a social contract, of the violent "state of nature" among people. In varied genres (e.g., poems, plays, novels, memoirs, essays), we engage with the transformative powers of diverse aesthetics (e.g., catharsis, the sublime, theatre of cruelty, realism, fable, satire) and of religious faiths (e.g., deism, Hinduism, Judaism, Islam, Sufism, Buddhism) to counteract terror and redeploy our civil status in society. *A. Boden, M. Browning. May be offered 2008–09; not offered 2007–08.*

29000. Energy and Energy Policy. (=CHSS 37502, ECON 26800, ENST 29000, PPHA 39201) *PQ for ECON 26800: ECON 26500 consent of George Tolley. All students must have advanced standing.* This course is designed to show how scientific constraints affect economic and other policy decisions regarding energy, what energy-based issues confront our society, and how we may address them through both policy and scientific study, as well as how the policy and scientific aspects can and should interact. We address specific technologies and the policy questions associated with each, and also with more overarching aspects of energy policy that may affect several, perhaps many, technologies. S. Berry, G. Tolley. Spring.

Registration in the following courses is not restricted to third- or fourth-year College students. For descriptions of associated courses and programs, see the relevant sections of the catalog.

BIOS 22257. Darwinian Medicine. (=HIPS 25900) PQ: Completion of the general education requirement in the biological sciences. R. Perlman. Autumn.

HMRT 20100/30100. Human Rights I: Philosophical Foundations of Human Rights. (=HIST 29301/39301, INTL 31600, ISHU 28700/38700, LAWS 41200, LLSO 25100, MAPH 40000, PHIL 21700/31600) *M. Green. Autumn.*

HMRT 20200/30200. Human Rights II: Historical Underpinnings of Human Rights. (=HIST 29302/39302, INRE 39400, ISHU 28800/38800, LAWS 41300, LLSO 27100) *M. Geyer. Winter.*

HMRT 20300/30300. Human Rights III: Contemporary Issues in Human Rights. (=HIST 29303/39303, INRE 57900, ISHU 28900/38900, LAWS 57900, PATH 46500) *S. Gzesh. Spring.*