

Big Problems

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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 BA 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)

21500. What Is Civic Knowledge? (=HUMA 24906, ISHU 24906, PHIL 21006) *PQ: Third- or fourth-year standing.* What is civic knowledge? Although civic rights and duties are supposedly universal to all citizens in a “democratic” nation, their implementation often depends on the strength of community connections and the circulation of knowledge across racial, class, and social boundaries. Focusing on the city of Chicago, we ask how citizens (in their roles as citizens) forge communities, make urban plans, and participate in civic affairs. How does the city construct the public spheres of its residents? Are the social practices of Chicagoans truly “democratic”? Could they be? What does “Chicago” stand for, as a political and cultural symbol? For both Chicagoans and their representatives, the circulation of knowledge depends not only on conventional media but also on how the city is constructed and managed through digital media. *R. Schultz, M. Browning. Autumn.*

22200. Boundaries, Modules, and Levels. *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. Not offered 2009–10.*

22300. Empire. *PQ: Third- or 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. Not offered 2009–10.*

22500. Medicine and Society: Things, Bodies, and Persons. *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. Not offered 2009–10.*

22600. Autonomy and Medical Paternalism. (=BIOS 29311, HIPS 21901, 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, J. Lantos. Winter.*

23000. Looking for Ourselves Elsewhere: Cosmos and Conscience. *PQ: Third- or fourth-year standing. W. Schweiker, D. York. Spring.*

23400. Is Development Sustainable? (=ENST 24400, HIPS 23400, NCDV 27300, PBPL 24400) *PQ: Third- or fourth-year standing required; background in environmental issues not required.* This discussion course grapples 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. *Y. Fujita, G. Davis. 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. Spring.*

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 2009–10.*

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 does not meet requirements for the biological sciences major.* 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. Winter.*

24100. Science and Religion. *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, Staff. Not offered 2009–10.*

24150. Romantic Love: Cultural, Philosophical, and Psychological Aspects. *PQ: Third- or fourth-year standing.* This double-credit course combines humanistic and social scientific disciplines to examine the phenomenon of romantic love—a “big problem” in practical, theoretical, and cultural senses. The course starts 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 will be sought through the discussion of humanistic and social scientific texts and cinematic presentations. *The class meets for six hours a week. D. Orlinsky, H. Sinaiko. Not offered 2009–10.*

24160. Love and Tragedy in Tolstoy's *Anna Karenina*. (=CHDV 24160, GNDR 24160, HUMA 24160, ISHU 24160) *PQ: Third- or fourth-year standing.* Tolstoy's great novel *Anna Karenina* may be the finest and most compelling depiction in literature of the diverse aspects and outcomes of romantic love. Combining humanistic and social scientific perspectives, this course undertakes an intensive study of the novel to examine the joys and sorrows of romantic love, and the successes and tragedies that follow from it, as well as the aesthetic achievement of the novel as a major work of art. Resources for understanding the development of the novel's characters and the fate of their relationships are drawn from Freud's *Introductory Lectures on Psychoanalysis* and other works. Bases for a critical appreciation of the novel are drawn from Aristotle's *Poetics* and Nietzsche's *The Birth of Tragedy*. *D. Orlinsky, H. Sinaiko. Spring.*

24200. Psychoneuroimmunology: Links between the Nervous and Immune Systems. *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. Not offered 2009–10.*

24300. Globalization and Neo-Liberalism. *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., Hobsbawm, Williams, Arrighi, Polanyi) and economists (e.g., Palley, Taylor, Stretton, Marglin, Eatwell, MacEwan, Blecker, Brenner). *M. Rothenberg, R. Baiman. Not offered 2009–10.*

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 2009–10.*

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. Not offered 2009–10; may be offered 2010–11.*

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, Staff. Not offered 2009–10.*

24700. From Neo-Liberalism to Neo-Imperialism. *PQ: Third- or 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*, 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. Not offered 2009–10.*

24800. The Complex Problem of World Hunger. *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, Staff. Not offered 2009–10.*

24900. Biology and Sociology of AIDS. (=BIOS 02490, SSAD 65100) *PQ: Third- or fourth-year standing. This course does not meet requirements for the biological sciences major.* This interdisciplinary course deals with current issues of the AIDS epidemic. Readings are based primarily on *AIDS Update 2010*. *J. Quintans, H. Pollack. Not offered 2009–10; may be offered 2010–11.*

25000. Images of Time: Japanese History through Film. *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 work in English. *J. Ketelaar, M. Raine. Not offered 2009–10.*

25100. Evolutionary Theory and Its Role in the Human Sciences. *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. Not offered 2009–10.*

25200. Body and Soul: Approaches to Prayer. *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? *Not offered 2009–10.*

25300. Utopias. *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, technophilia, new social movements, radical conservatism, and fundamentalisms. We focus on literature and art, (e.g., music, painting, architecture and urbanism, film and digital media). *L. Berlant, R. Zorach. Not offered 2009–10.*

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. Not offered 2009–10; may be offered 2010–11.*

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 2009–10.*

26300. Globalization: History and Theory. *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. Not offered 2009–10.*

26600. Antonioni's Films: Reality and Ambiguity. *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. Not offered 2009–10.*

27000. Perspectives on Imaging. (=ARTH 26900, BIOS 02927, 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, J. Elkins. Winter.*

27500. The Origins and Consequences of Differences in Human Capabilities. *PQ: Third- or fourth-year standing.* This course investigates the neurological, psychological, social, and economic consequences of early deprivation. *J. Heckman, Staff. Not offered 2009–10; may be offered 2010–11.*

27600. Creation and Creativity. *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. Not offered 2009–10.*

28000. Terror, Religion, and Aesthetics. *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. *M. Browning, Staff. Not offered 2009–10.*

28100. What Is Enlightenment? (=HUMA 28109, RLST 23403) *PQ: Third- or fourth-year standing.* What is enlightenment? How does one become enlightened, and who is enlightened? In Euro-American civilization, the 18th-century Age of Enlightenment championed the powers of human reason against religion and superstition to achieve scientific progress. Buddhism in the 19th century was represented by the heirs of Enlightenment as a religion for the Enlightenment to the point of not being a religion at all. Both traditions offer pathways to freedom (or liberation?) that draw on our rational capabilities, and both sponsor the production of knowledge that re-vision our place in the world, but they seem to be opposed: How could reason reject 'religious' beliefs but also take part in 'religious' traditions that aim to bring certain kinds of persons into being? We compare the mental models, discourses, methods of analysis, world-images, and practices of these traditions of enlightenment in order to assess the kinds of disciplines that their theoreticians and practitioners acquire and use. *M. Browning. Spring.*

28500. Sex and Ethics. (=ENGL 28500, GNDR 28502, PHIL 26209) *PQ: Third- or fourth-year standing.* Sex is a big problem. How do we think about sex in proximity to considering the ethics of risk, the ethics of harm, the potential for good? Developing an account specifically of an ethics of sex requires thinking about the place of sex and sexual vulnerability in social life with an eye toward understanding what's good and what might count as abuses, violations, disruptions, or deprivations of specifically good things about sex. In this course, we read, write, and think about sex and ethics in relation to a variety of the rubrics (e.g., act, harm, fantasy, a good, technology, health, disability, love). Probable syllabus contents involve philosophy, cinema, literature, and social science. *L. Berlant, C. Vogler. Winter.*

29000. Energy and Energy Policy. (=CHSS 37502, ECON 26800, ENST 29000, PBPL 29000, PPHA 39201, PSMS 39000) *PQ: Third- or fourth-year standing. PQ for ECON 26800: ECON 26500 and consent of instructor.* This course shows 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, 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. *S. Berry, G. Tolley. Autumn.*

29100. What Do the Genomes Teach Us about Evolution? (=BIOS 29319) *PQ: Third or fourth-year standing.* The 21st century opened with publication of the draft human genome sequence, and there are currently over 3,000 species whose genomes have been sequenced. This rapidly growing database constitutes a test of 19th and 20th century theories about evolution and a source of insights for

new theories. The course discusses what genome sequences have to teach us about the relatedness of living organisms, the diversity of cellular life, mechanisms of genome change over evolutionary time, and the nature of key events in the history of life on earth. The scientific issues are related to the history of evolutionary thought and current public controversies about evolution. *J. Shapiro, M. Long, 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, W. Wimsatt.*

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) *Autumn.*

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

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