Freshman Seminars Fall 2001

SECTOR I: SOCIETY

Money in Society and Culture

Jay Dautcher, Assistant Professor of Anthropology

Across history and across cultures, money has profoundly shaped the social world. In its myriad forms and functions, money finds expression as object and idea, as complex technological system and potent psychological symbol. In this course we will consider the meanings that social scientists, cultural critics and popular movements have invested in the objects and practices that surround the use of money in human culture. Topics to be covered include: ideas about the origins and functions of money; the role of money in ancient and contemporary global trading regimes and political formations; diverse and multiple regimes of exchange and money use in different cultures; the impact of money on notions of value, time, social life and moral order; ritual, magical and symbolic uses of money; and alternate money forms such as community-based currencies and digital/cyber cash. While focusing on objects and relationships associated with economic life, the course will serve as an introduction to basic concepts anthropologists use to think about society, culture and politics. Readings, classroom discussion and guided research projects will provide the basis for a series of short writing assignments. Sector I: Society (Distribution)

anth (025) 120.401 or folk (221) 120.401 | Monday | 2:00 - 5:00

Amsterdam: Venice of the North, or a Modern Sodom and Gomorrah?

Robert Naborn, Lecturer in Dutch

This seminar will take you on a virtual canal boat trip through Amsterdam, guided by a Dutch native. Stops along the way include:

- the Cum Laude Coffee shop near the Red Light District, offering you a look into the way that Dutch society tries to cope with drugs and prostitution,
- the Rijksmuseum and the Van Gogh Museum, witnesses to Holland's art history,
- the Nederlandsche Bank, the Dutch central bank, providing insight into European central banking, and
- the Universiteit van Amsterdam, evidencing the differences between the American and the Dutch educational systems.

In-class discussions will include Dutch policies on finance, education, art, health and crime. Through slides, film, texts and the internet you will gather information to engage in these discussions, which will culminate in an essay answering the question in the course title. Sector I: Society (Distribution)

dtch (449) 008.301 | Monday, Wednesday & Friday | 10:00 - 11:00

Identity, Intimacy, Maturity

Vivian C. Seltzer, Professor of Human Development and Behavior

Psychological development is ongoing throughout life. Specific age periods are defined as critical periods of development when psychological identity is either resolved or remains unfulfilled as a result of premature closure or identity diffusion. Identity, intimacy and maturity are related concepts, independent but intertwined. A full identity reinforces psychological

readiness for intimacy (which may or may not be accompanied by physical intimacy). Possession of identity and the ability it brings to engage in intimate relations profoundly affects attainment of psychosocial maturity. This course examines both the process and content of critical areas of psychosocial functioning. Both the idiosyncratic nature and the interrelated dimensions of each of the three periods are examined as are definitions, positive and/or negative contributing forces, manifestations, irregularities and so forth. Readings introduce the theoretical framework which underpins these three concepts. Class seminars present their theoretical linkages and raise further issues; class projects and assignments allow for pragmatic analyses. Sector I: Society (Distribution)

frsm (233) 104.301 | Tuesday | 1:30 - 4:30

Dilemmas in International Development

Richard Estes, Professor of School of Social Work

World social development has arrived at a critical turning point. Economically advanced nations have made significant progress toward meeting the basic needs of their populations; however, the majority of developing countries have not. Problems of rapid population growth, failing economies, famine, environmental devastation, majority/minority group conflicts, increasing militarization, among others, are pushing many developing nations toward the brink of social chaos. This seminar exposes students to the complex social, political and economic forces that influence national and international patterns of development. Particular attention will be given to the development dilemmas confronting the developing nations of Asia, Africa and Latin America. Attention also will be given to helping students understand the possible choices that more economically advanced countries can make in helping poorer countries advance their development objectives. Students will undertake original research on an international development topic of special interest to them. They also will be invited to meet with prominent professionals in the international development community. Sector I: Society (Distribution) frsm (233) 106.301 | Wednesday | 2:00 - 5:00

Integrity

Joan Goodman, Professor of Education and Howard Lesnick, Professor of Law The concept of integrity as a moral value has been aptly called both fundamental and elusive. Drawing on readings from literature, philosophy and the social sciences, this course will examine the meaning of integrity and the reasons underlying its centrality and elusiveness. We will also consider the ways in which it may come to play a defining role in decision making, both in our personal lives as students, teachers and citizens, and in the ethics of such professions as business, education, law and medicine. Sector I: Society (Distribution) frsm (233) 128.301 | Tuesday & Thursday | 10:30 - 12:0

The Law and Lawyers in American Society: Perspectives in Film and Literature

Arnold J. Rosoff, Professor in Legal Studies

Public perceptions of the law and lawyers are strongly reflected in our literature, films and TV shows. Moreover, the depth of the public's fascination with these subjects is reflected in the extremely large volume of this material. This course will focus on depictions of lawyers in film - from very positive (To Kill a Mockingbird) to very negative (The Firm), from non-fiction (Inherit the Wind) to fanciful (The Devil's Advocate), and from the sublime (First Monday in October) to the ridiculous (The Fortune Cookie). It will explore tough issues of professional

ethics and business practicality, such as a lawyer's decision to pursue the public interest even when doing so risks financial ruin for his firm (A Civil Action). The course combines lecture, Socratic dialogue, and group discussion in an informal setting. Active, regular class participation is required and will count significantly in the grading.

frsm (233) 290.301 | Thursdays | 4:30 - 8:00 | Goldberg College House Lounge

Ethics

Milton W. Meyer, Lecturer in Philosophy

Four sorts of questions belong to the study of ethics in the analytic tradition. Practical ethics discusses specific moral problems, often those we find most contested (e.g. abortion). Moral theory tries to develop systematic answers to these moral problems, looking for general principles that explain moral judgments and rules (e.g. consequentialism). Meta-ethics investigates questions about the nature of moral theories and their subject matter (e.g. absolute, objective, etc.). Finally, there are questions about why any of this does, or should, matter to us (e.g. why be moral?). We will investigate all four of these types of questions using primarily contemporary sources. (General Requirement)

phil (493) 002.301 | Tuesday & Thursday | 1:30 - 3:00

Globalization: Costs and Benefits

David Rousseau, Assistant Professor of Political Science

Perhaps the most hotly debated topic in international relations today is globalization. Supporters of globalization argue that it raises standards of living, improves the quality of life, and spreads democracy and liberty. Opponents of globalization claim that it impoverishes the weak, destroys traditional cultures, and undermines democratic institutions. What is globalization? What causes it? And what are the most important economic, political and cultural consequences of globalization? This course will examine these questions by exploring competing theoretical explanations, case studies and individual histories. Requirements include short written assignments, a midterm and a final exam. Sector I: Society (Distribution) psci (505) 009.301 | Friday | 2:00 - 5:00

Freedom and Political Theory

Andrew Norris, Assistant Professor of Political Science

What does it mean to be free? What are its metaphysical and practical preconditions? Is freedom something that individuals enjoy in private, or something that requires a vibrant public life? Has the idea of freedom evolved with our cultural, economic and industrial life? How do the modern media affect the freedom of our choices? Is freedom simply the absence of external constraint, or are there criteria internal to the idea of freedom? This course will address these and other central questions in the political philosophy of freedom. The readings will be intense, demanding and abstract, and the discussions in our small group will demand a lot of every participant. But the theme should prove as engaging as it is important to a group of people most of whom have only recently left home for the freedom of the university. What sort of freedom that is will, of course, also be open to question.

Readings will include the Declaration of the Rights of Man and the Citizen 1789, Hannah Arendt's What is Freedom?, Zygmunt Bauman's Freedom, Isaiah Berlin's Two Concepts of Liberty, Epictetus' Enchiridion, Eric Foner's The Story of American Freedom, Sut Jhally's The Political Economy of Culture, Marx's On the Jewish Question, Mill's On Liberty, Sartre's The

Flies, and selections from Thomas Hobbes' Leviathan, Aristotle's Politics, and de Tocqueville's Democracy in America. Sector I: Society (Distribution) psci (505) 009.302 | Tuesday & Thursday | 1:30 - 3:00

Visual Politics

Anne Norton, Professor of Political Science

In this seminar we will look at sight as a site for politics. Debates over the veiling of Muslim women will lead to discussions of secularism, the public sphere, repressive tolerance, and the language of dress. The performance art of Orlan, who uses cosmetic surgery (which she has filmed) to reconstruct herself in various forms of the feminine, and the photography of Shirin Neshat, who produces images of women's bodies inscribed with texts, raise questions about the body and its relation to writing and textuality. Uses of women as icons of the nation in monuments (the Statue of Liberty), sculptures and paintings (Marianne and la Republique), and in political cartoons open questions about the meaning of the feminine and the communicative power of images. We will look at films and film theory, paintings, sculptures and theories of representation, everyday modes of dress, and theories of the performance of sexuality. Sector I: Society (Distribution)

psci (505) 009.303 | Tuesday | 1:30 - 4:30

Constitution Making

William Harris, Associate Professor of Political Science

This is a seminar in constitutional theory which will focus on the problems of creating or restructuring a political order by writing and adopting the design of that order in a set of words contained within a text. The course will have a large component of political and interpretive theory, as well as American political thought. There may be some materials from other constitutional systems besides the United States. However, the course is primarily a way of looking analytically at the founding of the American Constitution by considering how a new constitution would be written, argued for, and ratified more than 200 years later, then questioning the nature of its authority. After more than two centuries of experience in interpreting the existing constitutional document, how might a constitution-maker draft a new one to take into account the problems that we have discovered? Requirement: Extensive reading and active scholarly discussion; one short analytical paper; one medium-length paper; and a final essay examination. Sector I: Society (Distribution)

Students who are not in the General Honors program need permission from the General Honors Office. Call (215) 898-7451.

psci (505) 187.301 | Monday & Wednesday | 3:00 - 5:00

Globalization: Costs and Benefits

David Rousseau, Assistant Professor of Political Science

Perhaps the most hotly debated topic in international relations today is globalization. Supporters of globalization argue that it raises standards of living, improves the quality of life, and spreads democracy and liberty. Opponents of globalization claim that it impoverishes the weak, destroys traditional cultures, and undermines democratic institutions. What is globalization? What causes it? And what are the most important economic, political and cultural consequences of globalization? This course will examine these questions by exploring competing theoretical explanations, case studies and individual histories. Requirements include short written

assignments, a midterm and a final exam. Sector I: Society (Distribution) psci (505) 009.301 | Friday | 2:00 - 5:00

Male-Female Communication, East and West

Franklin Southworth, Professor Emeritus of South Asian Regional Studies

Every individual has a unique way of speaking. Some of our differences in speech style are individual, while others are affected by our gender, our upbringing, ethnic group membership, place of origin, socio-economic class, age or other factors. These differences can enrich, and sometimes complicate, our verbal interactions with other members of our society.

This course looks at these differences in a cross-culturally oriented framework which emphasizes the social context of face-to-face communication, both verbal and nonverbal. We will be concerned with communication in male groups, in female groups, and in mixed groups, in our own society and in others; we will look at aspects of social behavior which correlate with communicative differences. We will seek explanations of communicative differences in terms of the socialization process and the different social roles which we play as men or women, and as members of different social groupings.

Apart from learning about interactions between language and social life in our own and other societies, the course is designed to enhance observational skills and to encourage an analytical approach to the study of verbal and nonverbal communication. One weekly two-hour session will be devoted primarily to discussion of the readings (which include writings by linguists, anthropologists and sociologists, social and educational psychologists, political scientists and others) with minimal lecturing. A second one-hour session will be used for observation and practice, including simulated interactions and films. In all of our discussions, we will attempt to bridge the cultural experiences of North Americans and those of members of other societies (particularly South Asians).

The first eight weeks of the course will acquaint students with the main assumptions made about this subject by works in a number of different disciplines. The remaining time will be spent on individual research projects, including discussion of individual readings. The papers and projects will involve both library research and observational research.

Papers: Four short (2-page) papers on specified subjects. One final paper on individual work. Regular attendance and participation in discussion are expected. Sector I: Society (General Requirement)

sars (593) 013.401 or wstd (677) 013.401 | Wednesday | 2:00 - 5:00

Race and Public Policy

Douglas Massey, Professor of Sociology

This seminar examines the historical origins of racism and the influence of race on u.s. public policies. Specific policy areas to be considered include welfare, housing and social security. Sector I: Society (Distribution)

soci (589) 041.301 | Wednesday | 2:00 - 5:00

Society and History

Ewa Morawska, Professor of Sociology

At the turn of the 21st century attention is focused on the future, but how much about our lives and social world is determined by the past? How does history shape our personal lives, preferences and identities? How does contemporary society—including its economy, culture and

politics—reflect the events of the past? In this seminar we will explore how the past matters to the present by looking at individual biographies and at the group experiences of peoples of different nationalities, races and ethnicities and religions. Sector I: Society (Distribution) soci (589) 041.302 | Thursday | 1:30 - 4:30

The Nineteen Sixties: Preludes and Postludes

Ivar Berg, Professor of Sociology

The roaring Twenties—with pacifist protests, noisy new music (Jazz), women's new and modern ways, startling norms about sexuality and alienated expatriates—turned out to have been a virtual rehearsal for the turmoils that were the 1960s. Indeed, many of our present day students' parents, "the Baby Boom," picked up where the "lost generation" left off, making the period 1930-1960 an interruption in our "civil" and "culture wars!" In discussions in the seminar, after a review of key triggering forces in the 1950s, we will analyze the 1960s several movements, e.g. their protests against our foreign policy ventures, our suburbs, our "materialism" and our "establishment" values, and then assess the implications of the political and the social, economic and cultural residues of the 1960s on America's 1970s and 1980s. Some students may count it a blessing, for example, that the 1960s brought an end to our military draft, but that development contributed to increasing public apathy towards foreign policy matters, something of a problem in a democracy. We will explore several other resonances of a deeply troubled and troublesome era. (The Thanksgiving holidays will afford opportunities, meantime, to help families to revisit the twilights of their youth.) Preference will be given to Goldberg College House residents. Sector I: Society (Distribution)

soci (589) 041.303 | Tuesday | 3:00 - 6:00

War and Peace

William Evan, Professor of Sociology

An examination of seven theories of the causes of war which will be tested by case analyses of well-documented wars throughout history—from the Peloponnesian wars to the war in Kosovo. The concluding section of the course deals with five theories and strategies for the prevention of war. Students apply the theories in preparing a term paper on a specific war. Sector I: Society (Distribution)

soci (589) 052.301 | Wednesday | 2:00 - 5:00

Homelessness and The Urban Crisis

Dennis Culhane, Professor of Social Work

This seminar in Urban Studies introduces students to many of the major social issues confronting our nation's cities by focusing specifically on the problem of urban homelessness. The course examines the treatment of homelessness and extreme impoverishment as social problems historically, as well as through contemporary debates. Several areas of intensive study will include: the low income housing crisis, welfare reform and income maintenance strategies, health care issues and urban/suburban relationships. Particular attention is also paid to the structure of emergency services for people who have housing emergencies. The course concludes by examining current policies and advocacy strategies. Sector I: Society (Distribution) urbs (657) 100.301 | Wednesday | 5:00 - 8:00

SECTOR II: HISTORY & TRADITION

Magical Science: Sages, Scholars and Knowledge in Babylon and Assyria

Steve Tinney, Professor of Asian and Middle Eastern Studies

From sympathetic rituals to cure sexual dysfunction to the sages' esoteric creation of worlds through the manipulation of words, we will learn from the ancient writings of Assyria and Babylonia what knowledge was, what it was good for, and how it was divided. This interdisciplinary course will combine literary, anthropological, historical and cultural approaches to textual, archaeological and iconographic data to bring to life the worlds, words and beliefs of these ancient intellectuals. Sector II: History and Tradition (Distribution) ames (465) 047.301 | Tuesday & Thursday | 1:30 - 3:00

The Rise and Fall of Ancient Maya Civilzation

Jeremy Sabloff, Professor of Anthropology and Director of the University Museum The civilization of the ancient Maya, which flourished between approximately 300 b.c. and the Spanish Conquest of the 16th century a.d. in what is now southern Mexico and northern Central America, has long been of wide public interest. The soaring temples of Tikal, the beautiful palaces of Palengue, the sophisticated carved monuments and sculpture, and the complex writing, astronomical, and mathematical systems have been widely photographed and written about. For much of the 20th century, scholarly knowledge about the ancient Maya was greater than knowledge of many other pre-industrial civilizations. But revolutionary advances in archaeological research and the decipherment of Maya hieroglyphic writing over the past two decades have led to completely new understandings of the development of Lowland Maya civilization, the rise of urban states, and the successful adaptation to a difficult tropical environment. This seminar will examine the studies that have led to these new insights and will evaluate the exciting new models of Maya civilization and its achievements that have emerged in recent years. Sector II: History and Tradition (Distribution) anth (025) 032.401 or ltam (383) 032.401 | Wednesday | 2:00 - 5:00

Cultures of the Book

James O'Donnell, Professor of Classical Studies

The impact of various technologies (from writing to various forms of manuscript to print to electronics) on the way the written word gives shape to a culture. Emphasis on Western cultures from Plato to the present, but participation by students with interest or expertise in non-Western cultures will be of great value to the group as a whole. The course offers an ideal perspective from which students can consider meta-issues surrounding their own special interests in a wide variety of fields, as well as learn to think about the way in which traditional fields of study are linked by common inherited cultural practices and constructions. Sector II: History and Tradition (Distribution)

clst (101) 158.401 or engl (197) 071.401 | Tuesday | 1:30 - 4:30

Superstition & Erudition: Daily Life in the Middle Ages

Francis Brevart, Associate Professor of German

Individuals in medieval times lived basically the same way we do today: they ate, drank, needed shelter, worked, had sex, became ill, planned religious holidays, talked about the weather, were intrigued by the secrets of nature in their environment, traveled, and were eager to learn about people and customs in distant places. The difference, of course, lies in the manner in which they

carried out these actions and fulfilled their goals. This course focuses on several aspects of daily life in the Middle Ages (12th - 16th centuries). We will read the German Volkskalender, the medieval predecessor of the Farmer's Almanac, to gain insights into medieval chronology and astrology, around which a multitude of quotidian happenings were centered (farming, slaughtering of animals, personal hygiene, marrying, escaping from jail, steps taken to conceive a male child, appropriate days to let blood, etc.). We will look at medieval cookbooks and become instantly disillusioned with today's so-called medieval banquets. We will discuss daily life in and around the university (curriculum at the newly founded European universities, how to become a professor, how to obtain or create books, and "night life"), and investigate the curiosities and hazards of traveling by land or sea. Finally, the course will explore the precarious state of medieval medicine and pharmacology, the specific diseases of men and women and their frequently barbaric treatments, the use of so-called wonder drugs, exotic plants and animals by professional physicians and medical charlatan alike, and early forms of marketing. Sector II: History and Tradition (Distribution)

grmn (293) 008.301 | Monday, Wednesday & Friday | 11:00 - 12:00

Creating Britain: Memory and Revolution

Julia Rudolph, Visiting Mellon Fellow

This seminar will examine important cultural and national transformations in Britain in the 17th and 18th centuries—a time in which both a British nation and a commercial culture were being forged. We will pay particular attention to the ways in which Britain's memory and interpretation of her past helped to shape her future. What were some of the effects of civil war and revolution on succeeding generations of Britons? How did Britain's experience of revolution in the 17th century affect her reaction to events in America and France, and in Scotland and Ireland, in the 18th century? What, more generally, can we discover about the relationship between memory and culture? In looking at these British attitudes towards the past we will also be exploring different conceptions of time—political, religious, legal, scientific, royal and poetic means of charting past, present and future—that shaped interpretations not only of events, but also of national identity. Course materials will include primary documents, interpretive essays and texts, and films. Requirements will include weekly readings, class discussion, analytical papers and presentations. Sector II: History and Tradition (Distribution)

hist (317) 101.301 | Monday | 2:00 - 5:00

Apocalypse and Millennium: Classical to Modern Models

Nina Caputo, Visiting Mellon

Fellow Are predictions of apocalypse unique to this time and place, or do they have their origins elsewhere? This class sets out to consider the religious, historical and literary roots of the Western fascination with the millennium and apocalypticism. We will begin our survey with a discussion of biblical sources. Then we will trace these themes through late antiquity and the middle ages, ending with a discussion of apocalypse and millennium. Students will conduct research on an apocalyptic movement, figure, or narrative of their choice; and write a paper demonstrating how apocalyptic symbols, narrative structures or imagery from the biblical and late-antique sources were adapted in that literature. Class sessions will be comprised of close examination of texts and discussion of modern scholarship. Sector II: History and Tradition (Distribution)

hist (317) 101.302 | Monday | 2:00-5:00

Literature of Dissent From Socrates to Sakharov

Benjamin Nathans, Assistant Professor of History

Can the pen really be mightier than the sword? What kind of people dare to speak truth to power, and what arguments and values do they employ? In this seminar we will study some of the classic literature of dissent, including biblical prophecy, ancient Greek critiques of democracy, the Protestant Reformation, the revolutionary Enlightenment, Marxism, and the dissident movements of our own century in the United States, the Soviet Union and China. We will also touch upon recent controversies involving limitations on freedom of speech on college campuses, including Penn. Across this broad spectrum we will be concerned with the intellectual strategies of resistance to systems of power perceived as illegitimate or unjust, and the power of the word in political and public life. By analyzing how the desire for fundamental change has been articulated in a variety of historical contexts, we will sharpen our skills in critical reading, discussion and writing. Over the course of the semester, each student will write two short response papers (roughly a thousand words each) which will be sent via e-mail to the entire class on the Sunday before we meet. Response papers are meant to raise questions, engage other students, note what confuses or stimulates you and compare various texts or individuals. Each student will also make a brief oral presentation concerning one of the assigned primary documents, in consultation with a satu (Speaking Across The University) advisor. Additional assignments include a book review (roughly five pages) as well as a longer paper (seven to eight pages) on a topic chosen in consultation with the instructor. SectorII: History and Tradition (Distribution)

hist (317) 102.301 | Tuesday | 2:00 - 5:00

World War II

Thomas Childers, Professor of History

This course will examine the diplomatic origins and military course of World War II and the domestic implications it had in Europe and Asia. Substantial reading from the literature of the war and a research paper will be required. Sector II: History and Tradition (Distribution) hist (317) 102.302 | Tuesday | 2:00 - 5:00

Space & Place in Colonial America

Robert St. George, Associate Professor of History

This seminar will explore different ways that people in Colonial America shaped and used social spaces—landscapes, buildings, social classes, colonialism itself—in order to locate or "place" themselves in political order, negotiate cultural contact zones and establish identities in a changing social world. Topics to be considered may include: relationships among European settlers, Native peoples, and African slaves; the reproduction of European culture in the New World; creole communities; changing conceptions of gender and sexuality in colonial America; and expressive culture such as speech, costume and ritual practice. Sector II: History and Tradition (Distribution)

hist (317) 103.301 | Wednesday | 2:00 - 5:00

Violence and Aggression in America

Michael Zuckerman, Professor of History

America was born in one war and reborn, as Lincoln said at Gettysburg, in another. Our folkheroes have, as often as not, been figures of lethal aggression: Davy Crockett, Billy the Kid, John

Dillinger, Bonny and Clyde, the list goes on and on. Our favorite sports are our most violent, in which death is nearest: football and auto racing. Our mass media are drenched in sadism and inconceivable without it: comic books, movies, TV, music and more. We have long had the highest homicide rates in the so-called civilized world. And yet, violence and aggression play remarkably minor parts in the stories that historians have told of America. In this class, we will try to repair a bit of that neglect. There will be readings across the chronological span of American history and an individualized research project on a topic of your own devising. Sector II: History and Tradition (Distribution)

hist (317) 104.301 | Wednesday | 2:00 - 5:00

American Intellectual History

Bruce Kuklick, Professor of History

This course will examine the way Americans thought about the deep questions of religion, science, politics and the social order throughout our history. We will be reading from the original sources, for example: Jonathan Edwards, Benjamin Franklin, Ralph Waldo Emerson, Abraham Lincoln, William James, John Dewey, Willa Cather, Ruth Benedict. Short weekly papers and discussion of assigned topics will be required. Sector II: History and Tradition (Distribution) hist (317) 104.302 | Wednesday | 2:00 - 5:00

African American Women's History

Barbara Savage, Associate Professor of History

This course is an introduction to the history of African American women since 1890. Readings will explore the shifting economic, social and political status of African American women within the context both of their own communities and the nation as a whole. One common theme will be the resistance of African American women to racial, economic and sexual oppression with special emphasis on the work of black women activists. Consideration also will be given to the representations of black women in various media, including radio, film and television. Sector II: History and Tradition (Distribution)

hist (317) 104.303 | Tuesday | 2:00 - 5:00

Work and Leisure

Rosanne Curranino, Visiting Mellon Fellow

Work and what is now its opposite, leisure, are central elements of American culture today. This course will examine how the cultural and social meanings of work and leisure have changed over time in the United States. The course will begin by studying what Americans understood as the "separation" of work and leisure in the early 1800s and then turn to an investigation of that separation's implications for class and gender in the 19th and 20th centuries. Using a variety of sources, including fiction, and film, we will investigate the ways in which men and women have understood the meanings of their work experiences and leisure pursuits. And we will also look at the ways that images and ideas about work and leisure have shaped social classes, gender roles and American popular culture. Students will write two short papers and one longer final paper. Sector II: History and Tradition (Distribution)

hist (317) 104.304 | Wednesday | 2:00-5:00

Interethnic Relations among Asian Americans

Eiichiro Azuma, Assistant Professor of History

This reading seminar will focus on how different groups of Asians interacted with each other in the context of early 20th-century American society, especially in Hawaii and California. Such issues as ethnicity, complexity of race relations (as opposed to conventional black-white binarism), and the intricate entanglements of class and race will be also examined. Sector II: History and Tradition (Distribution)

hist (317) 104.402 or asam (035) 013.402 | Wednesday | 2:00 - 5:00

Classic Icons vs. Cinematic Images: Defining Popular Culture in the Middle East

Froozeh Kashani-Sabet, Assistant Professor of History

The meaning of a culture can sometimes best be understood through a study of popular traditions in everyday life. This course will grapple with issues of identity, conflict and nationality by analyzing the culture produced for and consumed by a wide spectrum of the general public. Political cartoons, photography, novels, film, music, dance and other modes of cultural expression will be used to explore the historical roots of the political anxieties and social dislocations occurring in modern Middle Eastern communities. Sector II: History and Tradition (Distribution)

hist (317) 106.301 | Tuesday | 2:00 - 5:00

Debating "Asian Values"

Frederick Dickinson, Associate Professor of History

Accompanying the flood of Japanese cars, Chinese textiles and Korean steel to American shores in the 1980's were heated debates over the vitality of Asian culture. Asia had become the only non-Western region of the world to match the economic success of Europe and North America, it was proposed, because of such supposedly distinctive "Asian values" as thrift, hard work and family. After the economic crisis of 1997, on the other hand, the New York Times condemned the notion of "Asian values" as "bunk." This was neither the first nor last swing of the pendulum in the "Asian values" debate. Speculation about supposed "Asian" strengths and weaknesses has animated accounts of the region since Marco Polo in the 13th century. This freshmen seminar will explore changing Western images of East Asia from the 19th century to the present. What have Western observers identified as particularly "Asian" virtues and vices? How have those definitions changed over time? What does the current debate over globalization say about the future of "Asian values?" We will study the problem of cross-cultural analysis and consider changing images of Asia as an integral component of national development in the West.Sector II: History and Tradition (Distribution)

hist (317) 106.302 | Wednesday | 2:00 - 5:00

Building America

Emily Thompson, Assistant Professor

History and Sociology of Science This course explores the history of the built environment in America. Topics range from skyscrapers to suburbs, canals and railroads to interstate highways, department stores to the internet. The goal is to understand not just the history of structures and infrastructures, but how social and cultural values have been "built into" our material environment. Sector II: History and Tradition (Distribution) hssc (321) 115.301 | Tuesday | 1:30 - 4:30

Worldviews in Collision: The Counterreformation and Scientific Revolution

Victoria Kirkham, Professor of Romance Languages

Our project will be both to explore the radical conflicts that developed in 16th- and 17th-century Europe when Protestant reformers and scientific discoveries challenged the authority of the Catholic Church, and to consider these developments in the light of modern parallels (Darwin, Freud, Einstein). Freedom of thought, heresy, book censorship and Utopian ideals will be discussed in conjunction with Machiavelli's comic play Mandragola, the vitriolic polemic involving Martin Luther, Thomas More and King Henry VIII; Tommaso Campanella's utopian dialogue The City of the Sun, selections from the scientists Copernicus and Galileo, and from The History of the Council of Trent by the Venetian Paolo Sarpi. We shall consider how these turbulent times found expression in poetry and the visual arts, with special attention to women writers and painters (Vittoria Colonna, Laura Battiferra, Sofonisba Anguissola, Lavinia Fontana). For modern retrospectives, we shall read two historical plays from the 20th century (Osborne's Luther, Brecht's Galileo) and view the classic Hollywood film utopia, Frank Capra's Lost Horizon. This seminar is affiliated with Speaking Across the University. Sector II: History and Tradition (Distribution)

Requirements: Three brief prepared oral presentations during the semester (a five-minute statement on an assigned reading, a five-minute reaction to an assigned reading; a five-minute "close-up" analysis of a chosen passage in a reading); a final oral report (ten minutes), on a topic of the student's choice, to be arranged in consultation with the professor, either in person or by e-mail. There will be a hour-long mid-term and a two-hour final exam.

ital (349) 260.301 | Tuesday & Thursday | 12:00 - 1:30

Introduction to Philosophy

Curtis Bowman, Lecturer in Philosophy

In this course we will investigate the topic of philosophical anthropology, i.e., the philosophical study of what it is to be human, as a means of introducing students to philosophy in general. We will do this by looking at several traditional themes: ethics, freedom and death. Since these issues concern everyone, we can begin to develop a philosophical view of what it is to be human by studying them in some detail. Sector II: History and Tradition (General Requirement) phil (493) 001.301 | Monday & Wednesday | 3:00 - 4:30

Introduction to Philosophy

Thomas Meyer, Lecturer in Philosophy

An introduction to such topics as our knowledge of the material world, the relation of mind and body, the existence of God, the nature of morality. (General Requirement) phil (493) 001.302 | Tuesday & Thursday | 10:30 - 12:00

Introduction to Philosophy

Staff

An introductory survey of some central philosophical issues, including: Is there a God? What is the relationship between the mind and the body? Are free will and determinism incompatible? Readings will be taken from both contemporary and historical sources. (General Requirement) phil (493) 001.303 | Tuesday & Thursday | 1:30 - 3:00

Christian Origins

Robert Kraft, Professor of Religious Studies

Christianity did not begin in a vacuum. Indeed it emerged from the complex Jewish world of which we catch a glimpse in the Dead Sea Scrolls, and it blossomed into various forms among the "mystery religions" of the Greco-Roman world around the Mediterranean Sea and farther east. In this course we will explore those developments in the first two centuries of the commonera, with special focus on the evidence preserved in the earliest surviving Christian writings, including the New Testament collection. The goal of the course is neither conversion nor its opposite, but understanding as best we can from this chronological and geographical distance what the participants in the various developments thought was happening and how they shaped and were shaped by their worlds. We will get very involved in discussing what can be known about the period and how much we as interpreters contribute to any resulting "historical" picture. Get down and dirty with ancient materials; it shouldn't hurt much! Join the excursion into some of the deepest roots of Western society. Sector II: History and Tradition (Distribution) rels (541) 135.301 | Tuesday & Thursday | 10:30 - 12:00

Introduction to Islamic Religion

Syed Nomanul Haq, Lecturer in Religious Studies

A comprehensive introduction to Islamic doctrines, practices and religious institutions in a variety of geographic settings from the rise of Islam in the seventh century to the present. Translated source materials from the Qur'an, sayings of Muhammad, legal texts and mystical works will provide an overview of the literary expressions of the religion. The course aims, as well, to view Islam in the immediacy of everyday life. Among the topics to be covered are: The Qur'an as scripture and as liturgy; Conversion and the spread of Islam; Muhammad in history and in the popular imagination; Concepts of the feminine; Muslim women; Sectarian developments; Transmission of religious knowledge and spiritual power; Sufism and the historical elaboration of mystical communities; modern reaffirmation of Islamic identity; and Islam in the American environment. Sector II: History and Tradition (Distribution) rels (541) 143.401 or ames (465) 136.401 | Monday & Wednesday | 4:00 - 5:30

SECTOR III: ARTS & LETTERS

Narrative Journeys: Africa and Asia

Roger Allen, Professor of Asian and Middle Eastern Studies

Have you ever read the Tales of Sindbad and his travels? Do you like narratives about journeys, both ancient and contemporary? The purpose of this seminar is to introduce freshmen to a variety of narratives in different literary genres; to do so through the theme of the journey, whether it be a physical journey from one place to another, a process of change a rite of passage perhaps, or an inward psychological quest. Female and male authors are presented, as are different periods in the long history of the Middle East and Africa. All the texts to be read are in English translation. Sector III: Arts and Letters (Distribution)

ames (465) 038.301 | Tuesday & Thursday | 3:00 - 4:30

Medicine, Literature and Culture in Japan

William R. LaFleur, Professor of Japanese Studies

This seminar is in many ways an exercise in comparison, by looking at how the practice of medicine in Japan differs from that in America. Japan, where people enjoy good health and live very long lives, not only combines "Western" with "Eastern" medical practices but also is a place where questions of medical ethics and bio-technology are often faced differently than they are in America. The fact that in modern times many Japanese writers had medical education makes Japanese literature, studied here in translation, a rich context for exploring a wide range of such questions. Film, too, will be a tool for our studies. A comparative look at what we might think about the body, the mind, and healing or dying processes will be the central focus of this seminar. Sector III: Arts and Letters (Distribution) ames (465) 197.301 | Tuesday | 2:00 - 5:00

Art and Mass Media: Theories and Practices, Late Eighteenth to Early Twentieth Centuries Ruth E. Iskin, Visiting Mellon Fellow

The 19th century saw the emergence of new mass media images that radically changed imagemaking, launched photography, modern advertising and early film, and reshaped ways of looking at images and experiencing time in ways that continue to resonate today. This seminar introduces students to interdisciplinary approaches to art, images, media, new technologies, and popular forms for exhibiting art and culture in world exhibitions and in museums. It includes critical analysis of paintings; print media, from prints of fine art to caricatures, fashion plates, illustrations and advertising; photography and color lithography; and early forms of mass-media entertainment—panoramas and early film. We will discuss: How did race, class and gender figure in mass media images of modernity? How did world exhibitions and museum installations reflect and constitute Colonialism? How do art, media images, and the social practices of looking associated with them, shape modern viewers and their experiences of time? The class will introduce participants to theories and scholarship in art history and in diverse disciplines which contribute to studying art, media and visual culture. Sector III: Arts and Letters (Distribution) arth (033) 100.301 | Monday | 3:00 - 6:00

Representing Pan-Asian American Identity CANCELLED

Karen Su, Lecturer in Asian American Studies, Assistant Director, Asian American Studies Program and Director, Pan-Asian American Community House

What is an identity? How do we define ourselves and how are we defined by others? We will consider these general questions in relation to an examination of the social and historical contexts that have shaped the concept of pan-Asian American identity. What groups have been considered part of Asian America? What are the issues that unite or divide Asian Americans? In what ways do students at Penn work together pan-ethnically, for instance, to form a coalition like apsc or to advocate for a student center like Penn's Pan-Asian American Community House (paach)? We will study how writing has helped to define Asian American identity and how pan-Asian ethnic consciousness and community have been represented in a variety of genres: journalistic, creative, and academic writing; social critique; personal memoir; speeches; and film. We will explore popular mainstream representations of Asian Americans and their impact on the conceptualization of Asian American identity. We will also discuss such issues as racism, assimilation, generational conflicts, family, gender, sexual orientation, and social class and how they affect Asian American identity and community formation. Sector III: Arts and Letters (Distribution)

asam (035) 012.401 or engl (197) 016.401 | Tuesday & Thursday | 10:30 - 12:00

Tragedy and Human Civilization

Jacqui Sadashige, Assistant Professor of Classical Studies

Although many of us feel that we can recognize tragic stories, films and even individuals, we would probably be hard-pressed to come up with a definition of tragedy itself. In this course, we will be exploring the definitions and uses of Greco-Roman tragedy within Western literary and intellectual history. In particular, we will focus on the subject of the individual in tragedy: representations of the rational and irrational mind and the relationship between violence and the tragic body. We will see how the ancient texts formulate these notions and examine the place of tragedy in later theories of the self and civilization. During this semester, we will consider formal tragedies by authors such as Sophocles, Euripides, Marlowe and Shakespeare, works by tragic theorists such as Aristotle and Nietzsche, and adaptations and interpretations of "the tragic" in more recent and non-Western film and literature. Sector III: Arts and Letters (Distribution) clst (101) 122.301 | Tuesday & Thursday | 1:30 - 3:00

Landscapes of Identity in Early 20th Century American Fiction

Marsha Fausti, Assistant Professor of English

Responding to the injunction to "write what you know," American writers in the early 20th century refocused their attention on the idiosyncrasies of the local. The result was a literature of identity and "place" which has been variously described as a natural outgrowth of literary naturalism; as an exemplification of low modernism; as an instantiation of modern primitivism. It will be primarily through the shifting lens of the latter category that we will assess the identical effects of both literal and symbolic landscapes of local specificity; of "sacred ground." Of particular interest for the seminar, however, will be the ways in which this literature resorts to "place" to found a construction of a new American, a project which, at some times, entails a displacement of the true Native Americans; which at all times entails a place-inflected refiguration of race, of gender, of class. We will read fiction and a little poetry—Toomer, Cather, Hughes, Hurston, Faulkner, among others; view at least one film; take advantage, now and then, of historical and/or literary and fine arts scholarship. Students will write weekly response papers, at least three short essays and a longer "project" paper at the end of the semester. Sector III: Arts and Letters (Distribution)

engl (197) 016.301 | Monday, Wednesday & Friday | 1:00 - 2:00

Dramatizing Histories

Roberta Stack, House Dean in Hamilton College House and Lecturer in English Imaginative reconstruction of the personal, private, and very human moments that surround historical figures and facts can be hard to resist. Playwrights have often indulged in these dramatic flights of historical fancy, and audiences revel at the chance to time travel. How delightful to play the voyeur spying on Richard of Gloucester as he plots for the throne of England, joining T. O. Jones as he organizes a worker's strike in 1968, sitting in on a master class for opera singers given by Maria Callas. In this course we will read plays which take historical facts and flesh them out dramatically. We will question not only audience perception and the limits (if any) on dramatic license, but also how one processes historical research. Given a set of facts about a past author, event, artist, or age, how far can/should a responsible scholar go in drawing conclusions? We will look at works by a range of playwrights working in diverse genres, such as Shakespeare, Sondheim, Oyamo, McNally, Shaw, Frayn, Stoppard and others. To the extent possible, we will attend productions of plays or view them on video. This course is

intended for those who love theatre, history and experiencing the past through intelligent imagining. Sector III: Arts and Letters (Distribution) engl (197) 016.302 | Tuesday & Thursday | 1:30 - 3:00

The Ambient Roar: The Novel in Our Media-Blitz Age

Christopher Donovan, House Dean in Gregory College House and Lecturer in English Over the course of the last century, the steady emergence of new technologies and communication channels has eroded the privileged position of the American novel at the forefront of popular and influential art forms. From what vantage have novelists observed the effects wrought by film, television and the most recently the Internet on the American consciousness? How have these new technologies, in turn, gradually altered the form of the novel? With an eye on how novelists define their role in this increasingly "noisy" climate, we will examine texts spanning the period from the early days of Hollywood to our digital present; texts may include Nathanael West's Day of the Locust, Walker Percy's The Moviegoer, Don DeLillo's White Noise, Neal Stephenson's Snow Crash and Chuck Palahniuk's Fight Club. We will illuminate this discussion by analyzing films, ranging from silent landmarks to contemporary pop-cultural milestones, that have altered our social fabric and means of perception in ways these novels criticize, mirror or celebrate. Sector III: Arts and Letters. engl (197) 016.303 | Monday & Wednesday | 3:00 - 4:30

Comic and Erotic Literature of the French Renaissance

D. E. Lorraine Sterritt, Lecturer in Romance Languages and Literatures, Dean of Freshmen and Director of Academic Advising

In this course, we will examine the ways in which 16th-century French writers make use of humor, from the sublime to the bawdy, in their treatment of relationships between the sexes and in their social commentaries. We will also read brief selections from Roman and Italian authors whose works influenced the French writers who came after them. Readings will include works by Francois Rabelais, Louise Labe and Marguerite de Navarre. As background, we will also read selections from Boccaccio's Decameron and Ovid's Metamorphoses. The class will be conducted in English, and the readings will be in English translation. Assignments will include oral presentations, a mid-term paper and a final paper. No prior knowledge of Latin, French or Italian is needed. Sector III: Arts and Letters (Distribution)

fren (229) 210.301 | Wednesday | 2:00 - 5:00

My Angel Made Me Do It

Karl Otto, Professor of German

Angels, angels, angels they are everywhere these days. You've seen them on tv (Touched by an Angel) and in films (e.g. Dogma). What are they really? Do they exist? Who are they? Why do some people think they have one? Good angels? Bad angels? We will explore angels from artistic, literary, theological and cultural perspectives. We will read and discuss, in English, some works of Rilke, Goethe, Milton, Fuentes, Marlowe, Benjamin, France and others; we'll view and discuss Wings of Desire and other films. We will consider the Jewish, the Christian and the Moslem perspectives and views. Sector III: Arts and Letters (Distribution) grmn (293) 010.301 | Monday, Wednesday, & Friday | 11:00 - 12:00

Desert Islands: Shipwrecks, Pirates and Exotic Places

Liliane Weissberg, Professor of German and Comparative Literature

The deserted island has become a popular topic for literature, painting, tv shows and cartoons. But what is so fascinating about these far-away places where one could imagine a new life, and different civilizations? This seminar will explore this question by exploring philosophical and literary texts, and by discussing examples from the visual arts and recent films and television shows. Readings will include texts by Sophocles, Shakespeare, Defoe, Campe, Schnabel, Rousseau, Poe, Tournier, Cortazar and others. Sector III: Arts and Letters (Distribution) grmn (293) 011.301 | Tuesday & Thursday | 10:30 - 12:00

The Stages of Comedy

Frank Pellicone, House Dean in Harrison College House and Lecturer in Italian
This course will explore the development of comedy as a cultural, aesthetic and political force
from antiquity through the Italian Renaissance, Elizabethan England, and into modernity. We
will read major theatric works of authors such as Plautus, Machiavelli, Shakespeare, Wilde and
Guare. We will also view film versions of these plays when possible, as well as works such as
Some Like it Hot, Tootsie, Election, Crimes and Misdemeanors and even Taxi Driver, which
admittedly would not necessarily be classified as a comedy. In addition to discussing these films
and plays we will consider various theoretical examinations of comedy by such authors as
Aristotle, Freud and Bergson. Texts will include Plautus' Pseudolus; Bibbiena's The Calandria;
Machiavelli's The Mandragola; The Deceived by the Intronati; Shakespeare's Much Ado About
Nothing and Twelfth Night; Jonson's Volpone; Wilde's The Importance of Being Earnest;
Innaurato's Gemini; Guare's Six Degrees of Separation. Films will include: Some Like it Hot; A
Funny Think Happened on the Way to the Forum; The Graduate; Tootise; Crimes and
Misdemeanors; Six Degrees of Separation; Working Girl; Election; Shakespeare in Love and
Taxi Driver. Sector III: Arts and Letters

ital (349) 240.401 or film (215) 170.401 | Tuesday & Thursday | 3:00 D 4:30

The Meaning of Language

Maribel Romero, Assistant Professor of Linguistics

Studying the meaning of linguistic utterances raises questions such as the following:

- How does animal communication differ from human language communication? For example, can animal communication encode false belief? Do animals "lie?"
- What kinds of meanings are encoded in different parts of speech (e.g., nouns and verbs)? For example, why don't any languages have a word for the concept "object that is green and was previously blue?" (Goodman's problem).
- Once we put words together in sentences, why are some sentences ambiguous? For example, "Susan defended herself better than Mary did." can be understood to mean that Mary defended herself or Mary defended Susan. The sentence "Susan only dated Bill." has different meanings depending on intonation. If we stress Bill, as in Susan only dated Bill, it means that Susan dated Bill and nobody else; if we stress the verb, as in Susan only dated Bill, it means that she dated—but not married—Bill.

In answering these questions, a selective overview will be provided of the relation between semantic interpretation and psycholinguistics, cognitive science, learnability theory, and computational linguistics. A wide range of linguistic data will be examined to illustrate and analyze the phenomena at issue, including language in birds and in whales, English, Romance

languages, American Sign Language, Japanese, Hindi, Salish, Finnish and Modern Greek. Sector III: Arts and Letters (Distribution)

ling (381) 055.301 | Monday & Wednesday | 3:00 - 4:30

Words Words Words

Christine Brisson, House Dean in Spruce College House and Lecturer in Linguistics There's a lot more to word meaning than the typical dictionary entry lets on. In this seminar we will explore many facets of word meaning, beginning with the differences between various dictionaries and then opening up our explorations to the sorts of properties of words that dictionaries don't tell us about. Consider, for example, the sentences "Kara broke the window." and "The window broke." versus "Keith read the newspaper." and "Keith read." Both broke and read show an alternation between transitive and intransitive variants, but the subject of intransitive read (Keith) clearly has a different relationship to the verb than the subject of intransitive broke (the window). Where does this difference come from, and what consequences does it have for our understanding of how language works? Topics to be covered will also include "how to do things with words" (like promise) and the "Aristotle-Vendler" system of classifying verbs into classes such as "state" (know, love) and "activity" (write, annoy). Finally, we'll look at some contemporary work on the meanings of words, such as the Word Net lexical database, and how it has applications in computational projects, particularly in the building of specialized and general search engines for the internet. Sector III: Arts and Letters (Distribution) ling (381) 056.301 | Tuesday & Thursday | 3:00 - 4:30

What Music Means

Jeffrey Kallberg, Professor of Music

This course will explore how music takes on meaning in cultures of the present and the past. To this end we will consider a number of basic and important questions: What is music? What kinds of functions has it served in the past and what kinds does it serve today? What is the nature and significance of musical value? How does music inform notions of society and personal identity? Students will listen to a variety of music ("classical" music will be in the forefront of our investigations, but we will also explore various stages of popular and ethnic music), and will read selected critical texts about this music. The course will combine lecture and discussion; students will write a series of interpretive papers. Sector III: Arts and Letters (Distribution) musc (441) 015.301 | Tuesday & Thursday | 12:00 - 1:30

Literature and Music in the Long 19th Century

Daniel Foster, Visiting Mellon Fellow

This seminar explores musical adaptations of literature during the period often referred to as "the long 19th century," roughly the 1770's to World War i. Students will analyze literary and musical works not only on their own terms but also in connection with each other. These points of intersection between literature and music raise such questions as: Can an orchestra narrate? Does music have a past tense? Is an opera libretto like a movie script? Do certain literary texts invite musical adaptation? Is poetic rhetoric equivalent to musical rhetoric? By addressing such questions about literary and musical techniques for creating symbolic time—the imaginary world of "as if"—we can better understand how the fine arts shape one another. This seminar is designed to appeal to students of either literature or music across a broad range of periods and

nations, but no specialized knowledge is required. Sector III: Arts and Letters (Distribution) musc (441) 016.301 | Monday & Wednesday | 3:00 - 4:30

Religion and Film

Aditya Behl, Associate Professor of Religious Studies

This seminar is an introduction to different ways in which religion is represented in film. Emphasis upon religious themes, but some attention to cinematic devices and strategies. Although most films studied will deal with only one of the major historical religious traditions (Hinduism, Buddhism, Judaism, Christianity and Islam), the selection will always include at least two of those traditions. Sector III: Arts and Letters (Distribution) rels (541) 105.401 or film (215) 206.401 | Monday, Wednesday & Friday | 1:00 - 2:00

SECTOR IV: REASONING & ANALYSIS

Freshman seminars in the Mathematics Department at Penn aim to give the student an early exposure to the creative side of mathematics, with an emphasis on discovery, reasoning, proof and effective communication. Small class sizes permit an informal, discussion-type atmosphere, and often the entire class works together on a given problem. Homework is intended to be thought provoking, rather than skill sharpening.

Each seminar meets for one-and-a-half hours per week, and an entire year counts for one credit unit. Students may register for one or both semesters. It is recommended that math majors take both semesters.

One or the other of these seminars is required for the math major, but both are open to all students interested in mathematics. The best time to take these seminars is in the freshman or sophomore year. This course does not satisfy the General Requirement; however, virtually all students who take it will also take calculus; which does satisfy the Formal Reasoning and Analysis Requirement.

Introduction to Mathematical Analysis

Herman Gluck, Professor of Mathematics (This course has a more calculus flavor.) math (409) 200.301 | Tuesday | 12:00 - 1:30 math (409) 200.302 | Thursday | 12:00 - 1:30

Introduction to Modern Algebra

Peter Freyd, Professor of Mathematics (This course has a more algebraic flavor.) math (409) 204.301 | Tuesday | 1:30 - 3:00 math (409) 204.302 | Thursday | 1:30 - 3:00

SECTOR V: THE LIVING WORLD

Evolution of the Brain

Thomas Schoenemann, Assistant Professor of Anthropology

An introduction to the study of the evolution of the human brain. Students will review basic concepts in evolutionary biology. The direct fossil evidence of vertebrate brain evolution will

then be reviewed, and comparative (cross-species) perspectives on neuroanatomy and behavior will be emphasized. An analysis of the specific changes in the brain during human evolution will then be covered. We will consider possible sources of evidence relevant to brain evolution as well, such as the archaeological record of human behavioral evolution. Current controversies and theories about the causes and consequences of hominid brain evolution will be reviewed, including the possible role of language, tool use, sociality, dietary shifts and other behavioral adaptations. (General Requirement)

anth (025) 179.301 | Monday, Wednesday & Friday | 1:00 - 2:00

SECTOR VI: THE PHYSICAL WORLD

The Big Bang and Beyone

Gino Segre, Professor of Physics

This is an introductory course for freshmen who do not intend to major in a physical science or engineering. Theories of the origin, evolution, and structure of the universe ranging from the ancient perspective to the contemporary hot big bang theory to the provocative inflationary model of the universe. Topics include the solar system, galaxies and large-scale structures in the universe. Elementary algebra will be used. astr 007 and astr 001 cannot both be taken for credit. (General Requirement)

astr (037) 007.301 | Monday, Wednesday & Friday | 11:00 - 12:00

Structural Biology and Genomics Seminar

Ponzy Lu, Professor of Chemistry

Structural biology is the scientific method of describing, predicting, and changing the properties of living organisms, including humans, based on complete genome structures and three-dimensional structures of cellular components. It is a direct outgrowth of the intellectual and technical revolutions that occurred during the last decade. It has become a most powerful approach to understanding biology and solving problems in medicine.

We will discuss how macroscopic biological properties, such as reproduction, locomotion and viral infection, are determined by chemical properties of proteins and nucleic acids. Changes in biological function, such as those that accompany hereditary diseases like cystic fibrosis or sickle cell anemia, result from minute changes in individual proteins. Much larger changes in genome and protein structure are often tolerated without apparent consequence. This selectivity and tolerance provides opportunities for the biotechnology industry to alter biological functions in ways thought to guarantee profits.

A portion of the spring semester will address current fads/fashions in molecular research. We will also examine how research results in structural biology are presented in various audiences. The broad range of medical, social and political problems associated with the advances will be considered.

This is a two-semester seminar that continues in spring 2002 with 0.5 credit unit each semester. (General Requirement)

chem (081) 022.301 | Thursday | 1:30 - 3:00

Synthetic Metals: Introduction to Modern Solid State Chemistry

Alan G. MacDiarmid, Professor of Chemistry

Synthetic metals—polymers ("plastics") that have the electronic, magnetic and optical properties

of metals while retaining the flexibility and processibility characteristic of conventional polymers—have recently come of age. The basic concepts of modern solid state chemistry will be illustrated using synthetic metals and also semiconductors such as silicon together with selected applications in electronic devices, such as rectifiers, solar cells, etc. Suggested for science majors with at least one year of High School Chemistry. (General Requirement) chem (081) 023.301 | Tuesday & Thursday | 10:30 - 12:00

Freshman Recitation

Evolution of the Physical World

Hermann Pfefferkorn, Professor of Earth and Environmental Science and Gino Segre, Professor of Physics

This course will explore the Big Bang, and the origin of elements, stars, Earth, continents and oceans. Students must register for both the lecture and a recitation. The recitation listed below is restricted to freshmen and is led by Professors Pfefferkorn and Segre. (General Requirement) geol (289) 003.401 (lec) | Tuesday & Thursday | 1:30 - 3:00 geol (289) 003.402 (rec) | Tuesday | 3:00 - 4:00

Freshman Recitation

Introduction to Geology

Stephen Phipps, Professor of Earth and Environmental Science

This course is an introduction to the processes and forces that form the surface and the interior of the Earth. We will discuss changes in climate and the history of life.

We will also discuss earth resources and their uses. Students must register for both the lecture and a recitation. The recitation listed below is restricted to freshmen and is led by Professor Shagam. (General Requirement)

geol (289) 100.001 (lec) | Monday, Wednesday & Friday | 11:00 - 12:00 geol (289) 100.201 (rec) | Monday | 2:00-3:00

Honors Physics I: Mechanics and Wave Motion

Alan Johnson, Assistant Professor of Physics

This course parallels and extends the content of the introductory physics course for students in engineering and in the physical sciences, at a higher mathematical level. It is the first semester of a small-section two-semester sequence recommended for well-prepared students, and particularly for those planning to major in physics. Classical laws of motion: interaction between particles, conservation laws and symmetry principles, rigid body motion, noninertial reference frames, oscillations. Prerequisites: math 140 and 141. Students must register for the lecture and the lab. (General Requirement) Students who are not in the General Honors program need permission from the General Honors Office. Call (215) 898-7451 or e-mail honors@pobox.upenn.edu. phys (497) 170.001 (lec) | Monday, Wednesday & Friday | 10:00 - 11:00 | Monday | 2:00 - 3:00 phys (497) 170.101 (lab) | Wednesday | 1:00 - 3:00

SECTOR VII: SCIENCE STUDIES

Crystals: The Science and Power behind the Realities and Myths

Krimo Bokreta, House Dean in Kings Court English House and Lecturer in Environmental Science

From the daily vitamin supplements to the cosmetics we wear, crystals are prevalent in our life. They are present in the water we drink, in the food we eat, in the air we breathe. They are the topics of myths and legends, the rise and downfall of civilizations. They are at the core of our current technological revolution and the centerpiece of frontier science. This seminar will explore the basics of the scientific principles underlying the architecture and design of crystals, their properties and applications. We will examine the environments where they are formed: in rocks, in the bottom of the oceans, in space, in the human and animal body, in factories. We will also take a look at the relationship, through time, between man and crystals, the impact on health and the environment, as well as the development of legends, folktales and today's pop-culture. (General Requirement)

envs (201) 097.301 | Tuesdays | 7:00 - 10:00 p.m.