

Spring 2005 Freshman Seminars

Office of the Senior Vice President for Academic Affairs and Provost

STATE OF THE WORLD – 2005
Terence H. Cooper, Soil, Water, & Climate
AGRI 1905, Section 1
1 credit
Tuesday, 11:45PM - 12:35PM
S415 Soils, St. Paul
60423

The text that will be used in the course is from the World Watch Institute: *State of the World – 2005*. This book will look in depth at the state of the planet and how we can best manage human activities. In the 2004 edition, the Institute examined how we consume, why we consume, and what impact our consumption choices have on the planet and other people. With chapters on food, water, energy, the politics of consumption, and redefining the good life, *State of the World 2004* asks whether a less-consumptive society is possible—and then argues that it is essential. I will use this text as a starting point to introduce the topics that will be covered in 2005. The new book is available in January 2005.

Terry Cooper is professor of soil and environmental science. He teaches introductory soils, field study of soils, and environmental impact statements. He is also coach of the soils judging team. His research interests are in soil morphology, urban soils, and environmental assessment.

1421: THE YEAR CHINA DISCOVERED AMERICA
Robert Poor, Art History
ARTH 1909W, Section 1
3 credits
CLE: International Perspectives and Writing Intensive
Monday, 2:30PM - 5:30PM
240 Blegen Hall, Minneapolis West Bank
65558

Gavin Menzies, in *1421: The Year China Discovered America*, claims a Chinese treasure fleet set sail in 1421, circumnavigated the globe a century before Magellan, visited Australia three-and-a-half years before Cook, and colonized America years before Columbus. Menzies, a retired submarine commander in the Royal Navy, based his claims on his expertise as a mariner coupled with his insights in the interpretation of ancient maps, including a chart dated 1424, discovered by Menzies on “the wintry plains of Minnesota in the remarkable collection of early maps and charts” in the James Ford Bell Library at the University of Minnesota.

Guided by the curator of the Bell Library, we will examine that map, other ancient maps, and related evidence so that we might better measure the validity of Menzies’ controversial thesis. We will pay particular attention to visual evidence of maps and how images may reflect the Chinese view of the world or the often-contrasting worldview of the people who encountered the Chinese in the 15th century.

Robert Poor is a professor in the University of Minnesota’s Department of Art History. During his thirty years at the University, he has taught classes in the area of Asian art. He works with students from all quarters of the university, including future artists, curators, and art historians

NOTHING
Dr. Lawrence Rudnick, Astronomy
AST 1905, Section 2
2 credits
Thursday, 3:35PM - 5:30PM
Tate Laboratory of Physics B49
57020

Is nothing too wonderful to be true, as the great 18th century physicist Michael Faraday pondered? Following the Bard, in this seminar we will make much ado about “nothing.” From the birth of the Universe *ex nihilo* to the philosophies that find meaning in nothing, to the tangled history of zero over the centuries, to our beginnings as seen by theologians when even nothing was not. In our journey through the teeming vacuum, “nothing” is sacred, and will be both ventured and gained. Caution is advised, however, in telling people that you’ve signed up for “nothing”!

Lawrence Rudnick is a Distinguished Teaching Professor of Astronomy, who has survived 24 winters in Minnesota. He enjoys teaching and learning with students from freshmen through Ph.D. candidates. Professor Rudnick’s research involves the observation of high-energy objects, such as exploded stars, using ground-based telescopes and satellites. He is also involved in a wide range of public outreach activities.

**POPULAR CULTURE AND THE EVIL
EMPIRE: THE BUSINESS WORLD IN FILM,
BOOKS, AND MEDIA**

**Holly Littlefield, Business Administration
BA 1910W, Section 1**

2 credits

CLE: Writing Intensive

Wednesdays, 11:15AM - 1:00PM

**1-136 Carlson, Minneapolis West Bank
60408**

The course looks at the ways business is portrayed in the media and popular culture and at the ways that businesses are working to shape and control its image.

Holly Littlefield teaches communications courses at the Carlson School of Management. She has a Ph.D. in English and also works as a communication consultant for local businesses. She has worked as a writer and editor, and has published several books and articles.

**NEW ADVANCES IN GENETICS: IMPACTS
ON SOCIETY**

**Susan Berry, Pediatrics; Genetics, Cell Biology,
and Development**

BIOL 1905, Section 1

1 credit

Monday, 3:35PM - 4:25PM

**6-135 Jackson Hall, Minneapolis East Bank
61762**

The completion of the Human Genome Project has provided us with unparalleled access for conquering many diseases, but brings with it a host of difficult ethical questions for which we have no firm answers. Whose DNA is it, anyway? Who has rights to this information? How are your rights respected in genetic research? Students will select topics and present information on the scientific, ethical, and societal questions raised by those topics, and will participate in discussion on these complex issues.

Susan Berry, M.D., works with families and children with genetic conditions, birth defects, and inborn errors of metabolism. She also studies the effects of growth hormone on gene expression.

**MEDICAL GENOMICS: OPPORTUNITIES
AND DISCRIMINATION**

**Brian Van Ness, Genetics, Cell Biology, and
Development**

BIOL 1905, Section 2

1 credit

Tuesday, 2:30PM - 3:45PM

**Location TBA, Minneapolis East Bank
67265**

How does genomic screening work? Do we really want to know what our genes hold in store for us? Students in this seminar will prepare their own presentation of a selected genetic disease and the impact of genetic screening for it. We will then discuss ethics and public policy issues. For example, is it ethical to genetically screen *in vitro* fertilized eggs to genetically select a donor match for a bone marrow transplant? We will also examine educational planning for careers in medical genetics, research, genetic counseling, and others for which a degree in genetics prepares you.

Brian Van Ness is head of the Department of Genetics Cell Biology & Development and director of Bank On A Cure, an international project to assemble DNA on 20,000 cancer patients for genetic correlations with disease progression and therapeutic response to drugs. Dr. Van Ness has research interests in cancer genetics, mouse models of cancer, genetics and immune dysfunction in autism.

**CSI MINNESOTA: BIOLOGISTS LOOK AT
FORENSIC SCIENCE**

Kathryn Hanna, College of Biological Sciences

BIOL 1905, Section 3

1 credit

Wednesdays, 2:30PM - 4:00PM

**2-120 Molecular and Cellular Biology,
Minneapolis East Bank
62699**

How does science help solve crimes? What are the truths and myths behind forensic science analysis? Does crime scene investigation resemble what one sees on TV? The class will look at DNA fingerprinting, fiber analysis, forensic pathology, anthropology, entomology, etc., separating fact from fiction. Case studies will be examined where scientific evidence was a deciding factor. Guest speakers will include practicing forensic scientists. The class will also discuss strategies for continued student success in college.

Kathryn Hanna has worked with many biology undergraduates through the Biology Colloquium Program. She is the faculty advisor for the University's Forensic Science Club. Her interests include everything from microorganisms to art to how universities work.

**HOW CELLS BUILD NANOENGINES,
BIOSENSORS AND 3-D SPACE**
**Richard W. Linck, Genetics, Cell Biology, and
Development**
BIOL 1905, Section 4
2 credits
Tuesday, 2:30PM - 4:30PM
**Location TBA, Minneapolis East Bank
67247**

We will explore how living cells build nanodevices that provide for propulsion and biosensation, and control 3-dimensional space in the body. The course will begin with the professor setting the stage with the necessary background information. Subsequent course meetings will involve students' oral presentations, discussions of journal articles, and a written paper. Students will learn how scientists ask and answer questions, how this topic relates to biology, medicine, and nanotechnology, and how to write and present orally.

Dr. Linck has been a professor at the U of M since 1984, prior to which he worked at Harvard Medical School. He received his college and postgraduate education at Stanford University, Brandeis University, and the Laboratory of Molecular Biology, Cambridge, England. His research focuses on the molecular cell biology of ciliary and flagellar microtubules. His major teaching has been in Human Histology, taught to first year medical and dental students.

ETHICAL ISSUES IN SCIENCE
Karin Musier-Forsyth, Chemistry
CHEM 1905, Section 1
2 credits
Tuesday, 2:30PM - 4:10PM
**Location TBA, Minneapolis East Bank
65479**

This course will discuss topics related to important ethical issues in science as they relate to research and society. Topics to be covered may include cloning, stem cells, scientific misconduct, data analysis and reporting scientific discoveries.

Karin Musier-Forsyth joined the faculty in 1992, and currently holds a Merck Professorship in Chemistry. Her research involves nucleic acids (RNA and DNA) and proteins involved in translation of the genetic code and viral replication. She also does research in the area of DNA nanotechnology.

WHAT'S INSIDE THAT COOL GADGET?
Xiaoyang Zhu, Chemistry
CHEM 1910W, Section 1
2 credits
CLE: Writing Intensive
Thursday, 3:30PM - 5:10PM
**Location TBA, Minneapolis East Bank
57414**

We are increasingly enjoying the benefits of all the cool gadgets in daily life, be it an MP3 player that holds 10,000 songs, a PDA with phone/digital camera/Internet functions, or that latest pair of sneakers that make you feel like Michael Jordan. Have you ever wondered what makes a cool gadget work? This seminar will introduce you to the wonderful world of advanced materials that actually make these gadgets cool. We will talk about how we design, produce, and process these materials and how we learn from Mother Nature in making the most desirable gadget.

Xiaoyang Zhu grew up in China and received his B.S. degree from Fudan University and a PhD in chemistry from the University of Texas-Austin. After a postdoctoral stint at the Fritz-Haber Institute in Germany and a faculty appointment at Southern Illinois University, he joined the chemistry faculty at Minnesota in 1997.

CHEMISTRY IN SILICO
Jiali Gao, Chemistry
CHEM 1910W, Section 2
2 credits
CLE: Writing Intensive
Thursday, 3:30PM - 5:10PM
**Location TBA, Minneapolis East Bank
64886**

A course on the history and interplay of chemistry, biology and scientific computation, and their impacts in our lives. Discussion topics include everything from antifreeze to the question "What is life?"

Jiali Gao joined the Chemistry faculty in 2000 after serving on the faculty at SUNY-Buffalo. His research interests include theoretical and computational studies of the structure, dynamics and reactivity of biomacromolecules in solution.

FREEDOMS OF SPEECH/SPEECHES OF FREEDOM: FROM COMIC BOOKS TO UNDERGROUND INTELLECTUALS IN TIMES OF DURESS

Cecily Marcus, Cultural Studies and Comparative Literature

CSCL 19xx, Section x

3 credits

By examining acts of resistance that take the form of writing, speech-making, and art, this course will attempt to decipher secret messages written in code. Students will read everything from the audacious, like David Rees's post-September 11th internet-based comic *Get Your War On*, to the paranoid, such as Franz Kafka's "The Burrow," to the brave, as Zora Neale Hurston's "What White Publishers Won't Print." Students will also theorize the strategies and subterfuges used by underground writers, from teenagers to the most established intellectuals.

Cecily Marcus is a doctoral candidate in Cultural Studies and Comparative Literature. She recently returned from Buenos Aires, Argentina where she was researching her dissertation, "Culture Under Ground Argentina's Last Military Dictatorship".

TEEN FLICKS: YOUTH IN FILM AND VIDEO

Haidee Wasson, Cultural Studies and Comparative Literature

CSCL 19xx, Section x

3 credits

From innocent to rebellious, from earnest to anxious, from wide-eyed to wicked, from virgins to vampire slayers, the representation of youth in popular media has changed dramatically over the years. American youth were once widely portrayed as the hope of future generations, and as embodying the best and most virtuous social values. Today, there is little uniformity in the ways in which teens appear in film and television. Dudes lose their cars. Frat boys drink themselves into oblivion. Summer dreams turns into nightmare visions. Young college girls double as CIA agents. This course will provide an introduction to the study and analysis of film and media culture by focusing on films and television programs about, or featuring, teenagers. We will be primarily concerned to survey basic approaches to film and television analysis. Along the way, we will also consider the ways in which the representation of 'youth' and 'adolescence' have changed during the post-war period. This is an active learning, writing intensive course designed to encourage critical and creative thinking about the place of images and ideas about youth in our everyday lives.

Haidee Wasson's research interests include visual technologies, cultural institutions, and history of the media. Drawing on debates in film, media, and cultural studies her work focuses on 20th century visual culture, from the politics of the avant garde to the poetics of popular cinema. She is currently working on the politics and aesthetics of moving images designed specifically for the internet, contemporary debates about television, and the history of the discipline of Film Studies.

PUZZLES OF FINANCIAL MARKETS

Jan Werner, Economics

ECON 1905, Section 1

3 credits

Tuesdays and Thursdays, 2:30PM - 3:45PM

Location TBA, Minneapolis West Bank 65742

Why do prices in financial markets constantly change, and why are they so hard to predict? What are the true determinants of asset prices? Economists have many theories to answer these questions. Instead of exploring these theories, we will study some intriguing puzzles of asset pricing and their solutions. These puzzles will introduce students to basic concepts and questions of asset pricing. The course requires serious economic reasoning, but assumes no prior knowledge of economics.

Jan Werner received his doctorate in economics from the University of Bonn, Germany. His academic interests focus on microeconomic theory, mathematical economics, and financial markets.

THE STORY OF KING ARTHUR

Lianna Farber, English

ENGL 1905, Section 1

3 credits

Tuesday and Thursday, 9:45AM - 11:00AM

Location TBA, Minneapolis East Bank

65481

The story of Arthur, King of Britain, has a long life. It appears first in medieval chronicles; it is embroidered in French romance; John Milton had plans to make it the material of his epic; Henry Fielding mocked the King; the pre-Raphaelites focused on the doom of the relationships in the kingdom; and Tennyson, poet laureate, saw in it an idealized reign. The story was used, too, in America, where it was valued for its gothic qualities as well as for the idealism it embodied. Throughout the ages it has been a favorite subject for illumination, painting, printmaking, and film. In this seminar, we will examine the story of King Arthur as it has been told from the Middle Ages to Monty Python, looking at the shapes it takes, the reasons for its perpetual popularity, and why so many artists have found it relevant for so long. We will pay particular attention to the forms in which it has been presented and what each re-teller finds important in the story.

Lianna Farber is an assistant professor in the Department of English.

DYSTOPIAN LITERATURE: NIGHTMARES IN MODERN FICTION

Julie Schumacher, English

ENGL 1910W, Section 1

3 credits

CLE: Writing Intensive

Tuesday and Thursday, 11:15AM - 12:30PM

Location TBA, Minneapolis East Bank

65450

In this introductory literature and writing class, we will read and discuss *Brave New World*, *A Clockwork Orange*, *The Handmaid's Tale*, 1984, and other works of 20th century dystopian (or anti-utopian) fiction. How do the social and political nightmares in these fictional societies begin? Do these novels serve as warnings, entertainment, or both?

Julie Schumacher is a member of the Creative Writing and English faculty. She is the author of *The Body Is Water*; a PEN/Hemingway Prize finalist; *An Explanation for Chaos*; and *Grass Angel*, a novel for young adults.

HUMAN IMPACT ON THE ENVIRONMENT: THEN AND NOW

Dr. Jay Bell, Soil, Water and Climate

ES 1905, Section 1

3 credits

Monday, Wednesday, and Friday,

9:35AM - 10:25AM

375 Borlaug Hall, St., Paul

67531

Humans have had a profound effect on the environment throughout the history from our earliest civilizations until today. In this seminar, we will examine how human activities have altered the earth by studying specific events in our past and of concern today. Examples include land degradation in ancient Mesopotamia, the draining of the Aral Sea, and the Dust Bowl. We will focus on the causes, attempted solutions, and long-term effects of human impact on the environment using examples from around the world (Australia, China, Russia, Morocco, Antarctica) as well as what we find in our own backyards today. Topics will include an introduction to the earth as a system, global impacts (climate and land-use change), salinization, desertification, soil erosion, drastically disturbed lands, chemical contamination, and waste disposal. We will conclude with a brief examination of how we attempt to regulate human impacts on the environment today. The seminar will consist of two lecture/discussion and one group discussion session per week and will include library research to facilitate discussions.

Jay Bell is a professor of soil science, he has received three teaching awards, and worked in such diverse areas as wetland ecology, mine reclamation, soil conservation, remote sensing, soil salinization, soil mapping, and climate change. He has had the opportunity to work extensively in Australia, Morocco, and across North America. He serves as editor in chief of *Geoderma*, the international journal of soil science, and spends his spare time biking, hiking, camping, fishing, playing the guitar, trying to keep up with his two sons, and enjoying life.

RECREATIONAL TRAIL DESIGN
Mel Baughman and Stephen Carlson,
Forest Resources and Minnesota Extension
Service
FR 1901, Section 1
3 credits
CLE: Environmental
Wednesdays, 4:05PM - 6:00PM
19 Green Hall, St. Paul
Field Trip: April 22 to 24
59261

Learn how to design and construct recreational trails. Trail systems must be designed to offer different recreational activities (e.g., hiking, snowmobiling), meet the experiential needs of users with different ethnic and cultural backgrounds, and provide different types of experiences (from rugged wilderness trails to trails for persons with disabilities). Trails can be designed to encourage user interaction and learning about the natural world without damaging the natural environments through which they pass. Topics include: assessing user needs; trail planning; where to place trails in the landscape; construction standards; clearing rocks and trees; shaping the tread; sign information and design; structures for crossing obstacles (e.g., rivers, wetlands, steep slopes, boulder fields); funding sources; maintenance; trail crew management; and trail user manuals. Pre-requisite: enjoy hiking, bicycling, horseback riding, skiing, snowmobiling, ATVs, or canoeing. Weekend field trip required.

Mel Baughman is Assistant Dean and Extension Forester in the College of Natural Resources. He conducts research on forest policies and extension programs for private forest landowners, but his passions are wilderness canoeing, hiking, photography, fishing and hunting. **Stephen Carlson** is an Associate Professor in Extension who specializes in environmental interpretation and communication, especially signage, exhibit development, and interpretive planning.

REMEMBERING TO FORGET: THE
HOLOCAUST AND ITS AFTERLIFE
Bruno Chaouat, French and Italian
FREN 1909W, Section 1
3 credits
CLE: International Perspectives and Writing
Intensive
Tuesday and Thursday, 9:45AM - 11:00AM
Location TBA, Minneapolis
East Bank
65966

Since the 1960s, the Holocaust has been consistently invoked as the paradigm for reading violence and inhumane behavior. Political enemies are often compared to Hitler, and the wrong they do is compared to the genocide of the Jews. The German attempt at meticulously and industrially exterminating European Jewry and the Gypsies has become a figure for evil, violence, social injustice, abuse of power, trauma, loss of eventfulness, boredom in our techno-democracies, alienation in the postmodern, global village. Paradoxically enough, the Holocaust is considered both as a unique, incomparable event and as the ultimate measure of all violent and traumatic events in the history of the West, from slavery to ethnic, religious, colonial, territorial wars. Altogether absolute and relative, unique and repeatable, this supposedly incomparable event has become the best tool of comparison and the measure of all the negative things in our modern life. We will ask whether it is morally and historically acceptable to use the Holocaust as a metaphor for social, class, race, and gender discrimination. By closely examining testimonies, artistic endeavors, popular culture, and theory, this course will emphasize both the urge to study the Holocaust as a singular event and the drawbacks of a hyper-memory bordering on amnesia.

Bruno Chaouat's interest in 20th-century French literature and thought draws on critical theory and contemporary literary debates to explore the relationship between language, experience, and memory.

HUMANS AND THE EARTH

**Murray Jensen, General College
GC 1901, Section 1**

3 credits

CLE: Environmental

Tuesday, 11:15AM - 1:45PM

**65 Appleby Hall, Minneapolis East Bank
65434**

Using evolution as a framework, this seminar will focus on the place of humans in the history and future of the physical and biological environment. Using Richard Leakey's book "The Sixth Extinction: Patters of Life and the Future of Humankind" we will explore such topics as mass extinction events, speciation, the fossil record, biodiversity, and even creationism. Students will be expected to perform outside research, lead at least two class discussions, develop and present multi-media presentations using Microsoft's Power Point, and participate in cooperative groups. Contract grading will be used

Murray Jensen teaches general biology, human anatomy and physiology, and leads freshman seminars on evolution and environmental science. Murray's research interests include cooperative learning, evolution education, and the use of technology in science education.

MUSIC AND SOCIAL MOVEMENTS

Mark Pedelty, General College

GC 1903, Section 1

3 credits

CLE: Citizenship and Public Ethics

Wednesday, 5:00PM - 7:30PM

**219 Appleby Hall, Minneapolis East Bank
61171**

GC 1903 is about the role of music in political movements. We will study political music through focused reading and listening. The class will also work as an ensemble, developing meaningful musical statements about contemporary issues. Students will conduct research, engage in debate, develop positions, and write lyrics that express their thoughts and feelings concerning a shared question. A lyric-writing workbook and class workshops will assist in the composition process. A drum circle will build community, teach the rudiments of rhythm, and inspire compositional creativity. Selected lyrics will become part of a recording project involving students, staff, and faculty

Mark Pedelty teaches anthropology courses in the General College. He is the author of *War Stories: The Culture of Foreign Correspondents* (Routledge 1995), a book about the Salvadoran War, and several articles concerning

media, Mexican music, and teaching. Dr. Pedelty is currently writing a book concerning Mexican music under contract with the University of Texas press. His emphasis is on music and ritual as forms of public pedagogy.

MONSTROUS WHALES AND PHANTOMS: MODERN ARTISTS ENVISIONING MOBY-DICK.

Jill Barnum, General College

GC 1907W, Section 1

3 credits

CLE: Cultural Diversity and Writing Intensive

Tuesday, 2:30PM - 5:00PM

**219 Appleby Hall, Minneapolis East Bank
54591**

When Herman Melville published his classic novel MOBY-DICK (which I maintain is still the best book ever published in America, and I'll show you why), it was printed without any illustrations whatsoever. Moved by Melville's profound words and ideas, modern artists have taken up the challenge and produced a wide range of art--woodcuts, sketches, paintings, silkscreens, and even sculptures--that portray their particular and unique interpretation of MOBY-DICK. You may like some of these, be puzzled by others, and be moved to produce your own. We'll read the book, see the movie, and examine how MOBY-DICK has been rendered in art in recent decades.

Jill B. Barnum, Morse-Alumni Distinguished Teaching Professor, has published MELVILLE SEA DICTIONARY and ENCYCLOPEDIA OF AMERICAN LITERATURE OF THE SEA AND GREAT LAKES as well as essays on contemporary Asian American authors. In May 2002, she led a Global Campus Seminar to Hanoi, Vietnam.

THE SKIN OF THE EARTH

Chris Paola, Geology (plus guest speakers)

Geo 1905, Section 1

2 credits

Tuesdays & Thursdays, 1:25PM - 2:15PM

121 Pillsbury Hall, Minneapolis East Bank

66635

The seminar will focus on the earth's "living skin", in which physical, chemical, biological, and human processes come together to shape the surface of our planet. The topics covered will include:

- Types of surface forms and their distribution on Earth.
- Basic physical, biological, and chemical processes that shape the Earth's surface, and how they are interconnected
- How life has shaped and been shaped by surface processes and topography
- How the surface environment has affected human settlement and culture
- How humans have shaped and are shaping the surface environment

The course will involve at least one visit to St. Anthony Falls Laboratory to perform experiments on surface processes.

Chris Paola is a sedimentologist and the director of the National Center on Earth-Surface Dynamics (NCED). Chris and NCED scientists played a major role in designing, prototyping and testing the constituent exhibits of The Big Back Yard. This new outdoor science park at the Science Museum of Minnesota is designed to teach visitors about the processes that shape the Earth's surface. Chris received the Morse Alumni Award for Teaching and the John Tate Award for Undergraduate Advising.

MOUNTAINS AND THEIR PEOPLE

Christian Teyssier, Geology

Geo 1905, Section 2

1 credit

Wednesday, 10:10AM - 11:50AM

121 Pillsbury Hall, Minneapolis East Bank

Class starts January 26 and runs for 8 weeks

67521

This freshman seminar will cover the geographic and geologic significance of mountains, will tie mountains to present and past climate, and will investigate the role of mountains on cultural development. Born out of plate tectonics, mountains are fundamental barriers that control climate and limit trade. What is the relationship between mountains and cultures? From Afghan warlords to Tibetan monks, what is the role of mountains in shaping culture and inspiring wisdom? Students will be exposed to

basic principles of geology and physical and social geography.

Christian Teyssier was educated in France, obtained his Ph.D. in Geology at Monash University, Melbourne, Australia, and has been at the University of Minnesota since 1985. He conducts research on the mechanics of formation and collapse of mountains. In 2003, he received an award for outstanding contributions to post baccalaureate, graduate, and professional education from the University of Minnesota.

MAPS, DISCOVERY, COMMUNICATION, AND CHANGING WORLD VIEWS

Dwight Brown, Geography

GEOG 1905, Section 1

3 credits

Monday and Wednesday 3:25PM - 4:40PM

425 Blegen Hall, Minneapolis West Bank

66602

For over 6,000 years, maps have been used to communicate world views and document discovery. Different solutions to mapping problems emerged in different parts of the world. Clay, sticks, animal hides, and parchment were among the earliest media used to create permanent maps to guide travelers and communicate knowledge about the world. Although the map media, cartographic technologies, and base information have changed through time, some elements and issues of map making have persisted from the earliest beginnings of mapping to the present. The printing press ushered in a new mode of map making and more rapid spread of world knowledge. The advent of satellite imaging, personal computers, and television have brought dynamic map visualization into homes around the world.

In this seminar, we will explore technical issues of map making, including problems of converting a round earth to flat paper, distortion for selfish purposes, and the addition of third and fourth dimensions to map communication. We will also examine the evolution of world views from various parts of the world including Asia, Africa, the Middle East, and Europe.

Dwight Brown has a long career of research and teaching in cartography, geographic information science, and landscape evolution.

YOU LIVE...WHERE?

**Becky Yust, Design, Housing, and Apparel
HE 1902, Section 2**

3 credits

CLE: Cultural Diversity

Monday, 1:55PM - 4:55PM

144 McNeal Hall, St. Paul

65437

How does where we live shape our sense of who we are, who we consider our peers, and what our aspirations are? This course will explore where people live in neighborhoods and communities in the Twin Cities to examine issues of social and cultural diversity. From the West Side to North Oaks, from the North End to Near North, from Marcy-Holmes to Frogtown, and even within the residence halls of the U of M, we will learn from residents and organizations how they work together to meet housing needs within a milieu of diverse socio-cultural and economic backgrounds, traditions, and experiences. Visits will be made to various neighborhoods in the Twin Cities to see first hand their characteristics, similarities and differences, and to hear from individuals living and working there. Students will also examine their own preconceptions of housing and what it represents about people in our community.

Becky Yust conducts research on housing issues and has taught courses in the housing studies program and interdisciplinary courses serving all DHA students. Her current research interests are in housing adequacy and residential environmental issues including lead poisoning prevention, indoor air quality, and energy consumption and conservation practices. Becky also co-developed research-based standards for kitchen planning due to changing lifestyles and technology.

CONSUMING PASSIONS: WOMEN'S ISSUES REGARDING FOOD

Cheryl Smith, Food Science and Nutrition

HE 1904, Section 1

3 credits

CLE: International Perspectives

Thursday, 3:00PM - 5:45PM

23 Food Science and Nutrition, St. Paul

65821

Food – we love and we hate it, but it is one of the necessities of life. In society, eating is the primary way of initiating and maintaining human relationships. In many cultures, social connections are made through the exchange of food. The control of food has also been linked to political and economic power. The ability to produce, provide, control distribution, and consume food

is a key measure of power in many cultures and is often dependent on gender, class, caste (India), family organization, and the economic structure of their society. Furthermore, women have relationships with food on a personal level and societal pressures through media, fashion industry, family and peer influence, and religious ideology can drive this. During this class, we will investigate the relationship between food and women, and how it ultimately influences their health. We will examine a) food refusal through fasting (anorexia nervosa), dieting behaviors, and over-consumption (the onset of obesity) for women in the United States, b) food refusal through religious fasting (Nepal and India), c) food distribution patterns in households and communities (United States, India, Mexico, Japan, China), d) over-consumption of food, resulting in obesity, and e) kitchen culture in the United States (African American and white).

Cheryl Smith teaches in the area of community nutrition and has a special interest in socio-cultural aspects of food, nutrition, and health, and international nutrition. Her research focuses on how changes in environment, age, socioeconomic status, and globalization influence the nutritional status, dietary intake, and health of selected segments of the population. Domestically she has worked primarily with minority populations (Asian, African, and Native Americans); internationally she has taught and done research in Nepal, taught in Russia and Guinea Bissau, and traveled extensively in India, Thailand, and Vietnam.

FAT OR FANTASY?

Linda Brady, Food Science and Nutrition

HE 1908W, Section 1

3 credits

CLE: Citizenship and Public Ethics & Writing Intensive

Tuesday and Thursday, 3:00PM - 4:15PM

223 Andrew Boss Lab (Meat Science), St. Paul

61566

This course will examine issues surrounding two aspects of "fat or fantasy?" The first is to study the various theories of what makes people fat and how the weight loss industry and other groups might help or exploit people who are overweight. The second issue is the study of various types of fats that people eat, the amounts they eat, and the role of the food, restaurant, and hotel industry in promoting high fat or responding to needs for low fat in the US. Issues, such as the idea that the fast food industry is responsible for obesity, will also be addressed.

Linda Brady teaches Nutrition and Metabolism, Dietary Supplements, and Nutrition. She participates in teaching Introduction to Complementary Healing Therapies, a course that examines the biomedical model of health care as well as alternative or complementary models and modalities such as traditional Chinese medicine, chiropractic, naturopathy, and homeopathy. Linda's major research interest is in microbial ecology of the colon and how food affects the relationships of bacteria and health of the colon of the host.

EINSTEIN FOR EVERYONE

Michel Janssen, History of Science and

Technology

HSCI 1905, Section 1 [Meets with PHYS 1905, Section 1]

2 credits

Monday, 2:30PM - 4:25PM

Location TBA, Minneapolis East Bank

65477

Fascinated by things you have heard about Einstein's theory of relativity but always thought it would be too hard to understand? In this class we tackle such things as time dilation, the twin paradox, $E=mc^2$, and curved space-time, using no more than some basic high school algebra and geometry. Once we understand the basics of the theory, we turn to such questions as: what led Einstein to his new ideas about space and time? How were these ideas received by his contemporaries? Time permitting, we will also examine Einstein's contributions to quantum theory. In addition, we take a look at his personal life. There will be some short homework assignments over the course of the

semester and students will be asked to write dialogue for a screenplay co-authored by the instructor about Einstein's tumultuous life during the first world war. During the last session of the class the students are expected to perform the scenes they have written.

Michel Janssen used to be an editor for the Einstein Papers Project. He is currently gearing up for the festivities surrounding the centenary of Einstein's "miracle year" 1905. This is the fourth year he is offering this Freshman Seminar. Last year's edition was featured in "Inventing Tomorrow", the alumni magazine of the Institute of Technology.

GALILEO: SCIENCE & RELIGION

William Monsma & Christopher Macosko,

Chemical Engineering & Materials Science

IOFT 1905, Section 1

2 credits

Thursdays, 2:30PM - 4:10PM

Location TBA, Minneapolis East Bank

67588

The condemnation of Galileo by the Roman Inquisition has become the prime example of the suppression of enlightened science by superstitious religion. Who was Galileo? Why did his telescopic observations have such an impact? Was he the first real scientist? What were his views on religion? Why was he condemned? Was he guilty of the charges? How has he influenced our understanding of the world? Did he really spark a scientific revolution? Did he make belief in God untenable? How did he become a cultural icon?

This seminar will look at the historical background for Galileo's work. Then we will follow the stages in his career, with its scientific, religious, and political dimensions, reading some of his writings. Finally, we will trace his influence through the centuries since.

William Monsma is Adjunct Professor of Chemical Engineering and Materials Science, and Coordinator of the Galilean Center. He and his wife Mary Beth live in South Minneapolis, where they can often be found biking around Lake Harriet.

Christopher Macosko is Professor of Chemical Engineering and Materials Science, and Director of I PRIME, the Industrial Partnership for Research in Interfacial and Materials Engineering. He and his wife Kathleen live on Oak Street in Stadium Village, and have been known to entertain classes in their home.

THE ART OF AFRICAN MUSICAL PERFORMANCE

Sowah Mensah, Music

MUS 1905, Section 1

3 credits

Monday, Wednesday and Friday, 9:05AM - 9:55AM

107 Ferguson Hall, Minneapolis West Bank 66740

In this course, you will perform, discuss and critically analyze the music of Ghana, West Africa and other neighboring African stages. You will learn to play atentenben (a bamboo flute), a variety of African drums, and other traditional instruments. In addition, you will learn to sing, dance, listen, perform and develop music skills in a new culture; by learning the musical way of life for Africans and how this heritage affects African American music.

Sowah Mensah is an ethnomusicologist, composer, educator and "Master Drummer" from Ghana. He directs the African Music Ensemble at Macalester College and at the University of St. Thomas. Professor Mensah enjoys an active performing career and presents clinics, lecture, workshops and residencies at many colleges, school and music organizations throughout the United States.

EINSTEIN FOR EVERYONE

Michel Janssen

PHYS 1905 Section 1 [meets with HSCI 1905, Section 1]

2 Credits

Monday, 2:30PM - 4:25PM

Location TBA Minneapolis East Bank 57323

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Michel Janssen used to be an editor for the Einstein Papers Project. He is currently gearing up for the festivities surrounding the centenary of Einstein's "miracle year" 1905. This is the fourth year he is offering this freshman seminar. Last year's edition was featured in "Inventing Tomorrow", the alumni magazine of the Institute of Technology

INEQUALITIES, REPRESENTATION & GROUP POLITICS

Dara Strolovich, Political Science

POL 1903, Section 1

3 credits

CLE: Citizenship and Public Ethics

Tuesdays and Thursdays, 11:15AM - 12:30PM

Location TBA, Minneapolis West Bank 67221

The United States is marked by a tension between the principles of equal opportunity and equal representation on the one hand, and the reality of social, political, and economic inequalities among groups on the other. It is also marked by a tension between an ethos of individualism, and the prominent political and social roles played by groups organized along lines such as religion, race, ethnicity, profession, gender, class, sexuality, age, and national origin. What is the relationship between group inequalities and how much political "voice" groups have? What is the relationship between this voice and groups' ability to achieve their public policy goals? What *should* these relationships look like? We begin by considering each of the concepts in the title, reading historical and contemporary, as well as empirical and theoretical, accounts of inequalities, representation, and groups. We then examine a range of ways in which Americans make their voices heard in politics including voting, social movements, and interest groups. We conclude with a series of policy case studies paying close attention to the voices that are and are not represented in the policy process. We consider issues such as: What constitutes a political/social group? An interest? How persistent are inequalities in various spheres of US politics? Within American representative democracy, under what conditions are groups best able to have their interests represented and to improve their conditions?

Dara Strolovich has been a Research Fellow at the Brookings Institution and a Visiting Faculty Fellow at Georgetown's Center for Democracy and the Third Sector. She has published articles in the American Journal of Sociology, the National Women's Studies Association Journal, and Social Science Quarterly, and also has written an entry on "Poverty in Politics and Policy" for the forthcoming Encyclopedia of Poverty in the United States.

Her research has received awards from the Race, Ethnicity and Politics Organized Section of the APSA, the Association for Research on Nonprofit Organizations and Voluntary Action (ARNOVA), and the Midwest Political Science Association.

DEVELOPMENT OF PSYCHOLOGICAL STRENGTHS

Ty Daniel Tashiro, Psychology

PSY 1905, Section 1

3 credits

Tuesdays and Thursdays, 12:45PM - 2:00PM

Location TBA, Minneapolis East Bank

66558

The focus of this course is how humans' develop positive characteristics and how humans can thrive. The field of psychology has traditionally focused on how psychopathology or abnormalities develop and methods for treating psychopathology. However, considerably less is known about human strengths, how those strengths develop and how social scientists can nurture optimal development. This course will cover topics such as altruism, the function of positive emotion, how friendships develop social capabilities, happy romantic relationships, and the place for strength focused approaches in psychotherapy. There will be opportunities for experiential learning and small group discussion regarding some of the topics.

Ty Tashiro is a visiting assistant professor of psychology. His research interests concern personal growth following stressful life events, the function of emotion in interpersonal processes, and how adolescents develop knowledge about romantic relationships.

PSYCHOPATHS AND SERIAL KILLERS

Christopher J. Patrick, Psychology

PSY 1910W, Section 2

3 credits

CLE: Writing Intensive

Tuesday, 12:45PM - 3:45PM

N423 Elliott Hall, Minneapolis East Bank

66913

Psychopathic personality has been described as a "mask of sanity". While appearing superficially normal and personable, psychopaths exact a costly toll on society by covertly manipulating and coercing others to satisfy selfish aims and desires. Among the general public, the term "psychopath" brings to mind the image of a crazed or sadistic serial killer. However, psychopaths do not meet legal or conventional psychiatric criteria for insanity, and while it is probably true that most serial killers are

psychopathic, most psychopaths are not homicidal. In this class, we will review existing diagnostic criteria for psychopathic personality and we will discuss distinctions between this and other psychiatric disorders. We will examine different expressions of the psychopathic personality, including criminal and successful types, as well as the serial murderer, by using case histories. Other topics will include: psychopaths in history, literature, and film; personality profiling; causal factors in criminal and psychopathic behavior; and research on emotion and thought processes in psychopaths.

Christopher Patrick is a professor of psychology with a specialization in clinical and personality psychology. His research investigates basic emotional and cognitive processes through use of psychophysiological and behavioral measures, and the role of affect in psychological disorders.

WOMAN TO WOMAN: CREATIVE CROSS CULTURAL COMMUNICATION

Evette Hornsby-Minor, Women's Studies

WOST 1902, Section 1

3 credits

CLE: Cultural Diversity

Wednesday, 2:30PM - 4:30PM

175 Ford Hall, Minneapolis East Bank

58884

This course will address unintended barriers that students will experience at different phases of their academic careers. This course is especially designed for first generation college students and students interested in developing their cross-cultural communication skills. The participants will engage in an interactive process that will provide them with tools to confront the following issues: sexism, internalized oppression, covert and overt racism, and classroom alienation. We will examine the patterns of gender inequality and their relationship to other systems of inequality within families, communities and the larger society and how these patterns impact cross-cultural communication among women.

Evette Hornsby-Minor's dissertation focused on narrative ethnography, performance ethnography and the intergenerational experiences of Black women as mothers at Claremont Graduate University and San Diego State University's joint doctoral program in multicultural educational studies. She integrates her background in education, family therapy, Africana studies and the arts with her own lived experiences as a Black woman. Her transdisciplinary research proposes that artists can be both artistic and scholarly in all disciplines.