EXPLORATIONS



Freshman Seminars
Spring 2006
University of Minnesota

Office of the Senior Vice President for Academic Affairs and Provost

What Can You Expect in a Freshman Seminar

- Faculty who want to teach first-year students and are willing to talk to you about your experience at the University of Minnesota.
- To study an interesting topic.
- To talk, participate and engage yourself in class discussions.
- Expect to write and improve skills such as analysis, research, speaking in class, talking to your professor, and using the library.
- A small class.

How to Pick Out a Freshman Seminar

- 1. Circle courses with topics that interest you or that seem fun and challenging to learn about.
- 2. Take notes and use them as a reference while talking to your adviser during registration.
- 3. Check your schedule for available times.
- 4. Check to see which seminars still have open seats or if they are reserved for specific students.
- 5. Make a note if they fulfill a Council on Liberal Education (CLE) requirement or the Writing Intensive requirement.

What is Expected of You in a Freshman Seminar

- Participation: to learn you need to engage in the group discussion.
- Come to class prepared with readings and assignments.
- Express your thoughts and opinions.
- Visit your professor during their office hours.
- Get to know your classmates.
- Ask questions; about the seminar topic and the University

"STATE OF THE WORLD – 2006"
Terence H. Cooper, Soil, Water, & Climate AGRI 1905, Section 1
1 credit
Tuesday, 11:45AM – 12:35PM
415 Soils Building, St. Paul
59524

The text that will be used in the course is from the World Watch Institute: *State of the World* – 2006. This book will look in depth at the state of the planet and how we can best manage human activities. In the 2005 edition, the Institute examined Global Security, with chapters on security, disease, food, water, oil and building peace. This text will be used as a starting point to introduce the topics covered in 2005–2006.

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.

ANTHROPOLOGY OF DREAMING AND MYTH

John M. Ingham, Anthropology ANTH 1905, Section 1 3 credits Tuesday, 9:05AM – 11:50AM Minneapolis West Bank 66614

What are the sources of individual and collective fantasy, and what are the functions of fantasy for individuals and societies? Does individual psychology determine culture, or do cultures shape individual personality? In this seminar, we will examine these and other broad questions about the relationship between the individual, or self, and society and culture—a field of study known as psychological anthropology. Applying the most important recent psychological theories of dreaming and anthropological theories of myth and folklore, we will explore the interrelationship between dreaming and myth-making. We also will explore the relevance of psychological anthropology for understanding contemporary culture by examining selected children's stories and popular movies.

John Ingham received his Ph.D. from the University of California, Berkeley, in 1968. His interests include psychological anthropology, myth, folklore, symbolism, folk Catholicism, and Mexico.

THROUGH A GLASS DARKLY Lawrence Rudnick, Astronomy AST 1905, Section 1 2 credits Tuesday, 3:35PM - 5:30PM B49 Physics, Minneapolis Eastbank 55944

Imagine a world in perpetual cloud cover - what would we know of the Sun and Moon, the glorious universe of planets, stars and galaxies? In reality, the limits of human perception and understanding strongly influence our view of the world, from the largest to the smallest scales, and of our place in it. In this class, we will explore physical, biological, psychological and philosophical limits on our senses and brains and imagine the fascinating worlds that lie beyond.

Lawrence Rudnick is a Distinguished Teaching Professor of Astronomy, who has survived over 25 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.

NOTHING Lawrence Rudnick, Astronomy AST 1905, Section 2 2 credits Thursday, 3:35PM - 5:30PM B49 Physics, Minneapolis Eastbank

67261

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 theologies 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 over 25 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.

XBOX AND IPODS: MARKETS FOR DIGITAL GOODS

Fred Riggins, Department of Information & Decision Sciences
BA 1910W, Section 1
3 credits
CLE: Writing Intensive
Monday and Wednesday, 9:45AM – 11:00AM
1-136 Carlson School of Management,
Minneapolis West Bank
67346

This course focuses on the unique characteristics of digital goods in today's society. The overall trend towards more digitization impacts the type of products we buy, our entertainment, and how we gather and share information. Digital goods can include downloading music or movies from the Internet, playing online games with a network of competitors or cohorts, providing broadband Internet service at 30,000 feet for air travelers, offering free or fee-based information services to investors or sports enthusiasts, or the creation of digital products based on the sale of "smart" physical products. These types of digital products exhibit unique economic characteristics compared to physical goods. Modern digital networks also promote the notion that anyone can create digital products and promote them on their own blog site or Internet server, thereby opening the door for individuals to compete in today's digital marketplaces. Successfully competing in these markets requires an understanding of how digital goods are created, targeted to specific customer segments, priced appropriately, and managed in the presence of network effects that often accompany these products.

This semester course is discussion oriented and writing intensive, and offers an opportunity for students to examine market conditions for products directly affecting their daily lives. Students will read weekly assignments including analyses of digital markets, business cases, and commentaries on the impact of these goods on individuals and society. Weekly written assignments will include a mix of case analyses, product and market summaries, and a semester-long revise-and-resubmit writing project. In addition to the writing

assignments, contribution to class discussions will serve as the graded requirements of the course.

Fred Riggins's teaching interests include information technology management, digital and information-based goods, e-business strategy, and the economics of information systems. His research focuses on new business models for Internet-based commerce, strategies for implementing interorganizational systems, radio frequency identification (RFID) technology, measuring the value of information systems, technology transfer in global contexts, and the implications of the digital divide for managers and businesses.

ALIEN BIOLOGY: EXPLORING
BIOSCIENCE THROUGH SCIENCE
FICTION FILM AND LITERATURE
Robin Wright, Genetics, Cell Biology, and
Development
BIOL 1905, Section 1
1 credit
NOTE: will meet for 2.5 hours each week for
first 8 weeks of semester so that there is
sufficient class-time to view entire films
Tuesday, 4:00PM – 6:30PM
105 Cargill, St. Paul
60414

What are the potential consequences of the human genome project? What if a tyrannical dictator cloned himself? What kinds of life might exist on Mars or other planets? These questions were explored by science fiction authors and film makers long before they became topics of the nightly news. In this seminar, we will use films such as *GATTACA* and books such as *Darwin's Radio* to explore the underlying biological principles and processes.

Robin Wright is a professor in the Genetics, Cell Biology, and Development department and associate dean for Faculty and Academic Affairs in the College of Biological Sciences. Her research addresses the genetic control of cell structure and adaptation to physiological changes. She also lectures and publishes on the scholarship of teaching and learning in biology. She has been a fan of science fiction since she was in grade school, many years ago, and can appreciate that what is fiction today is fact tomorrow.

CSI MINNESOTA: BIOLOGISTS LOOK AT FORENSIC SCIENCE

Kathryn Hanna, College of Biological Sciences BIOL 1905, Section 2 1 credit Wednesday, 2:30PM – 4:25PM Location TBA, East Bank Minneapolis 64757

What is forensic science? 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, document analysis, 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.

NEW ADVANCES IN GENETICS: IMPACTS ON SOCIETY

Susan Berry & Scott McIvor, Pediatrics; Genetics, Cell Biology, and Development BIOL 1905, Section 3 1 credit Monday, 3:35PM – 4:25PM 6-135 Jackson Hall, East Bank Campus, Minneapolis 61071

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.

ETHICAL ISSUES IN SCIENCE Karin Musier-Forsyth, Chemistry CHEM 1905, Section 1 2 credits Tuesday, 2:30PM - 4:10PM 111 Smith Hall, Minneapolis East Bank 63233

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.

SCIENCE FICTION FILM Kristopher McNeill, Chemistry CHEM 1905, Section 2 2 credits Thursday, 4:00PM - 6:00PM S136 Kolthoff Hall, Minneapolis East Bank 67202

This course will discuss science fiction film starting with the early silent films including Georges Méliès' *Voyage to the Moon* (1902) and Fritz Lang's *Metropolis* (1927) and moving to the present day. In addition to trying to answer the question of why we keep making movies about outer space, robots, and space aliens, we will also examine the science behind science fiction.

Kristopher McNeill joined the faculty in 2000, and currently holds a McKnight Land-Grant Professorship in Chemistry. His research is focused on environmental chemistry, with an emphasis on pollutant degradation in aquatic systems.

CRYSTALS
Wayne Gladfelter, Chemistry
CHEM 1905, Section 3
2 credits
Wednesday, 3:30PM - 5:10PM
111 Smith Hall, Minneapolis East Bank
67203

The students will explore questions related to the structure and behavior of crystalline materials. The specific topics for discussion will depend on the student's interests. The topics can be as diverse as the use of crystals in pop culture to the use of crystals in electronic devices. Each student will be expected to ask questions, research answers and to lead discussions on the topics they choose.

Wayne Gladfelter has taught at the University of Minnesota since 1979. His research program involves study of reactions of inorganic and organometallic compounds especially as they relate to the formation of materials.

THE ELEMENTS
Wayne Gladfelter, Chemistry
CHEM 1905, Section 4
2 credits
Thursday, 3:30PM – 5:10PM
111 Smith Hall, Minneapolis East Bank
67204

We will discuss interesting properties of building blocks of all nature. The class will focus on the elements (e.g. carbon, ruthenium, gallium, etc.). Topics could include medical applications, nutritional information, industrial chemistry, etc. The specific content will focus on the interests and questions raised by the students. The students will be expected to conduct library research, collect literature results and summarize these in presentations to the class.

Wayne Gladfelter has taught at the University of Minnesota since 1979. His research program involves study of reactions of inorganic and organometallic compounds especially as they relate to the formation of materials.

TRADE AND THE GLOBAL ECONOMY Samuel Kortum, Economics ECON 1905, Section 1 3 credits Tuesday and Thursday, 2:30PM – 3:45PM 2-219 Carlson School of Management, Minneapolis West Bank 66529

Most economists think that free trade is beneficial to all and advocate it as one of the tools of economic development, yet people and countries fear the growth of international trade, and not without reason. In trying to allay the concerns of non-economists, economists have been unable to convey precisely their reasoning for their support of free trade. In this seminar, we will study the work of David Ricardo, a writer from the early 1800s, and the recent writings of Paul Krugman, an economist and *New York Times* columnist, to shed light on the issues of free trade and the global economy.

Samuel Kortum received his Ph.D. from Yale University. His research focuses on international economics, industrial organization, and macroeconomics.

HOW DO HUMANS AND ANIMALS NAVIGATE? Herb Pick, Institute of Child Development EdHD 1905, Section 1 3 credits Tuesday and Thursday, 2:30PM – 4:00PM 335 Peik Hall, Minneapolis East Bank 67281

South Sea Islanders have traditionally navigated hundreds of miles across the Pacific with no modern instruments. How do they do this? Toddlers come quickly to find their way around their own homes and neighborhoods. How does such spatial competence arise? What is the basis of the impressive spatial mobility of blind persons? The seminar will investigate these topics and more.

Herb Pick is a professor of developmental psychology in the Institute of Child Development. His interests have focused on the relation between perception and action. Professor Pick received an Outstanding Faculty award in 1997–98 from the CLA Student Board in recognition for his undergraduate teaching.

DYSTOPIAN LITERATURE: NIGHTMARES

IN MODERN FICTION
Julie Schumacher, English
ENGL 1910W, Section 1
CLE: Writing Intensive
3 credits
Tuesday and Thursday, 11:15AM – 12:30PM
216 Lind Hall, Minneapolis East Bank
63204

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 antiutopian) fiction. We will examine such questions as: 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 two novels for young adults.

UNDERSTANDING ENVIRONMENTAL ISSUES OF TODAY: LESSONS FROM THE PAST

Barbara Coffin, College of Natural Resources ENR 1901, Section 1

3 credits

CLE: Environment Tuesday and Thursday, 2:30PM – 3:45PM 175 Bell Museum, Minneapolis East Bank 67167

Minnesota's landscapes have played a powerful role in shaping the social and economic systems of our region. In large part, they determined where we settled, where we built our towns and cities, and what we did for a living. Today, these natural landscapes are hardly recognizable. What were the landscapes of the early 19th century? What have we gained in their conversion? What have we lost? In what ways do they continue to shape our futures? Understanding the ecology of Minnesota landscapes—its prairies, forests and wetlands—and the history of human interaction with these landscapes provides powerful context to contemporary natural resource issues that we must face and somehow resolve. This seminar, based in part on the 4-part documentary television series titled: Minnesota: A History of the Land, will explore Minnesota's environment and the role of

humans in its transformation from its post-glacial beginnings to today's urban growth.

Barbara Coffin is a research fellow with the Bell Museum of Natural History and Executive Producer of the four-part documentary series *Minnesota: A History of the Land*. Her research interests have focused on the ecology and conservation of Minnnesota's northern forests and the peatland ecosystem of the Glacial Lake Agassiz basin. As former director of the Minnesota's Peat Program and the Minnesota Natural Heritage Program at the Minnesota Department of Natural Resources and The Nature Conservancy, she has worked extensively with natural resource management, conservation, and public policy issues.

HUMAN IMPACT ON THE ENVIRONMENT: THEN AND NOW

Jay Bell, Department of Soil, Water, and Climate ES 1901, Section 1 3 credits CLE: Environment Monday, Wednesday, and Friday, 9:35AM – 10:25AM 375 Borlaug Hall, St. Paul 67201

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. 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 of 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.

UNDERSTANDING THE EVOLUTION-CREATIONISM CONTROVERSY

GC 1903, Section 1 Randy Moore, General College 3 credits

CLE: Citizenship and Public Ethics Tuesday and Thursday, 2:30PM – 3:45PM 67 Appleby Hall, Minneapolis East Bank 60043

This seminar is meant to help students develop their own understanding and appreciation of the evolution—creationism controversy, including its history, legacy, relevance, and key people. We will discuss a variety of issues related to the controversy, including those involving court decisions, public opinion, and related issues (e.g. racism, politics, etc.).

Randy Moore is a professor of Biology in General College. His research interests include evolution—creationism controversy and studying how students learn science. He is asked to speak throughout the country about this controversy and will incorporate these experiences into the seminar.

THE SCIENCE AND POLITICS OF GENETICS AND REPRODUCTION GC 1903, Section 2

Murray Jensen, General College 3 credits

CLE: Citizenship and Public Ethics Wednesday, 1:30PM – 4:00PM 104 Folwell Hall, Minneapolis East Bank 67118

There are two components to this course: science and politics. The science of genetics and reproduction involves learning the basics of DNA, fertilization, embryos, developmental biology, etc., as well as new developments in the science of becoming pregnant, such as *in vitro* fertilization techniques, as well as new science to prevent pregnancy while still being sexually active, such as the morning after pill.

The political portion of the course will revolve around bioethics; the hard work involved in making decisions surrounding genetics, DNA, sex, and reproduction. Topics will range from personal decisions, e.g., using a condom, to federal law, e.g., Row vs. Wade, and even world politics, e.g., the one child rule in China. Cultural and religious traditions will be used as a framework for many topics and special consideration will be given to the lessons learned from our country's history with eugenics.

Murray Jensen is an Associate Professor in General College where he teaches classes in general biology as well as human anatomy and physiology. His research interests include cooperative learning, technology enhanced learning, and evolution education. In 2001, Murray was awarded the H. T. Morse–Minnesota Alumni Association Award for Outstanding Contributions to Undergraduate Education.

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 Location TBA 54307

Although Herman Melville's *Moby Dick* is a true classic of American literature, it is easy to overlook the fact that it is also a true epic of multiculturalism. The crew of the whaling vessel the *Pequod*, on which nearly the entire novel takes place, contains men of mixed races from a number of countries: Native America, Africa, Asia, and Polynesia, to name a few. One of the most important characters is a South Sea Islander who is indirectly instrumental in saving the life of the book's narrator. In this man-versus-nature tale, people of different cultures may clash but essentially need to pull together in the life-and-death struggle that ends the book and results in the death of all but one of the crew.

The course uses awareness as a springboard for examining a wealth of representations of the book. When it was published in 1851, *Moby Dick* appeared without any illustrations whatsoever, although, in its language it is the most pictorial of

books. The 20th century has seen many artists attempting to recreate the book in their own version (or in what they believed to be Melville's), producing illustrations either of specific scenes or for the whole book. From Rockwell Kent to K.O.S. (Kids of South Bronx), people of all ethnicities have attempted pictorial representation in modes as diverse as painting, etching, silkscreen, woodcut, sculpture, and found objects. Exploring how such interpretations reveal and enhance themes and ideas in Melville's prose is the focus of the course.

Jill B. Barnum is Morse-University Alumni Distinguished Teaching Professor at the General College and Director of the Master of Liberal Studies Program, University of Minnesota, where she has taught since 1978. She is also Melville Society Executive Secretary and co-chaired the Second International Melville Society conference, Melville and the Sea, at Mystic Seaport in 1999. She has published Melville Sea Dictionary: A Glassed Concordance and Analysis of the Sea Language in Melville's Nautical Novels (1982) and Encyclopedia of American Literature of the Sea and Great Lakes (2001), in addition to numerous essays. Her latest book, "Whole Oceans Away:" Melville and the Pacific, is in press. Barnum has led University students in two Global Campus Seminars: to Hanoi, Vietnam in May 2002 (Folklore & Magic, Prisons & Temples: Vietnamese Literature in Translation) and to Dublin, Ireland in May 2004 (Literary Ireland: "The Land of Heart's Desire").

PEACEMAKING: THE SEARCH FOR A
NON-VIOLENT FUTURE
Maura Sullivan and Diane Knust, School of
Social Work
HE 1904, Section 1
3 credits
CLE: International Perspectives
Tuesday, 3:00PM – 5:45PM
280 Peters Hall, St. Paul
63529

This course will explore the concepts and possibilities for nonviolent and peaceful social changes from a community, national, and international perspective. Students will explore issues in regions/countries around the world, such as: historical and contemporary perspectives for conflict and violence; obstacles to the peace process, and how human rights, social change and development help or hinder the regions/country toward peace. Class content will focus on

international non-violent movements such as: suffrage, civil rights, anti-apartheid movement; liberation theology, international labor solidarity and eco-feminism. Past and current leaders in the international peace and justice movement will be studied. This course will be presented through classroom dialogue, conversation circles, lecture, video and CD-Rom material, guest speakers, and experiential mentoring. The conversation circle is a small group model, which helps to structure dialogue, encourage critical thinking skills, give students an opportunity to learn how to express their views and opinions and fosters mutual understanding of similarities and differences of opinion within the class cohort.

Maura Sullivan directed the field program in the School of Social Work for ten years. She has been with the school since 1977 and during this period taught a variety of direct practice and management courses that included Peace and Social Justice, Supervision and Consultation, Interdisciplinary Team Training, and Introduction to Social Welfare Program. Maura's research interests include cultural competency, international social work, community advocacy, and field work issues. She received her M.S.W. degree from the University of Minnesota.

Diane Knust is a lecturer with the School of Social Work.

HIGH SCHOOL: MOMENTS, MEMORIES, AND MEANINGS
Michael Baizerman, School of Social Work
HE 1908W, Section 1
3 credits
CLE: Writing Intensive and Citizenship &
Public Ethics
Thursday, 3:00PM – 5:45PM
278 McNeal Hall, St. Paul
60284

Graduating high school and beginning college are major life changes, ones that students already have thought about and will likely continue to think about a lot over several years. This seminar uses this transition from high school to the university to focus on the worlds of high school and students' experiences there, as seen from the perspective of the university – using students' memories, reflection, and using theories of youth development and of high school – as site, as social organization, as world(s). In doing this we will use perspectives, theories, research, and understandings from several

academic disciplines and professions, and use popular media, films, and videos and novels.

Michael Baizerman teaches on the everyday, ordinary lives of youth; on youth policy in the youth studies undergraduate program; and in the youth development leadership graduate programs. His discovery into healthy youth development is done in an interpretative frame using qualitative data collected in the field. He focuses on practical efforts to understand how "youth," as a socially constructed life-moment, is lived by young people, perceived by them and others, and reacted to by all. His current work concentrates on youth persons' civic engagement in the United States and in Northern Ireland.

JAZZ AND BLUES: FROM THE
BEGINNINGS TO NOW
Dean Sorenson, Music
MUS 1905, Section 1
3 credits
Monday, Wednesday, and Friday, 9:05AM –
9:55PM
149 Ferguson Hall, Minneapolis West Bank
66065

Rhythm and blues and jazz share a very similar birth. Both are uniquely American musical art forms that take advantage of the blending of many different musical and cultural traditions. In the course of their development, the paths of jazz and rhythm and blues have both intersected and run parallel, but both also have crossed American cultural boundaries in ways that few other forms of music have. In this seminar, we will explore the development of rhythm and blues and jazz, and look at the many different facets of modern music that have roots in either or both of these uniquely American styles.

Dean Sorenson is the director of the University Jazz Ensembles and a prolific and highly sought-after composer, arranger, trombonist, educator, and clinician. He received his B.A. in trombone performance from the University of Minnesota and his M.A. in jazz arranging and composition from the Eastman School of Music. Professor Sorenson is the author of several jazz books for teachers and young musicians. He is a strong advocate for jazz education and the expansion of the jazz repertoire.

DISTRIBUTIVE JUSTICE
Sarah Holtman, Philosophy
PHIL 1905, Section 1
3 credits
Wednesday, 2:30PM – 5:00PM
135 Blegen Hall, Minneapolis West Bank
66449

Most simply described, questions of distributive justice are questions about the right or morally appropriate division of the benefits and burdens of human cooperation. Most familiarly (and perhaps most interestingly), they are questions about how we properly divide the costs and benefits of life in a political society among its citizens. How is property appropriately defined and divided? When must those who are better off contribute some of their resources for the benefit of those who have less? What are the just consequences of my refusal to bear my share of societal burdens? In this seminar, we will examine questions of distributive justice by studying competing theories of what such justice requires of us and by considering concrete (and familiar) political issues. Among the philosophers whose theories we will consider are John Rawls, Arnartva Sen and Robert Nozick. Concrete issues we will explore include poverty relief, public school funding, and publicly subsidized housing and healthcare.

Sarah Hotlman's teaching and research interests focus on ethics, political philosophy, and philosophy of law. She is currently researching the nature and value of moral theory, specifically theories of justice and the insights they afford us in treating practical questions.

EMOTIONS AND THEIR ROLES IN OUR LIVES Chuck Stieg, Philosophy PHIL 1905, Section 2 3 credits Wednesday, 2:30PM – 5:00PM 215 Blegen Hall, Minneapolis West Bank 66450

Emotions have been a topic of discussion for philosophers for quite some time, and rightly so; emotions are an important part of our conscious lives, coloring our expectations and affecting the way we interact with others. What are emotions? Do emotions divide up, as some have suggested, into a basic emotion group and into a complex emotion group? Are emotions biologically shared across cultures? Or are they socially constructed by the views and circumstances of different cultures? In this seminar, we will explore the role of emotions in our lives. We will compare opposing views of emotion and rationality: on the one hand, the view that emotion interferes with and disrupts rational and good decision making, and on the other, the view that emotion is an integral component of our full functioning as rational agents. We also will consider the extent to which emotions influence, and ought to influence, our moral judgments.

Chuck Stieg is interested in the philosophy of mind and philosophy of science, with particular interests in the philosophy of cognitive science and the philosophy of biology. Currently, he is researching issues in the scientific study of emotion, the relationship between emotion and cognition, and animal emotions.

FISSION, FUSION, DIRTY BOMBS Joseph Kapusta, School of Physics and Astronomy PHYS 1905, Section 1 2 credits Monday, 2:30PM - 4:25PM 236A Physics, Minneapolis East Bank 66926

Nuclear bombs are the most destructive weapons invented by mankind. They have an additional fear factor because they involve invisible radiation, some of it short-lived and some of it long-lived. Mass destruction on a global scale is now unlikely with the end of the Cold War. However, many nuclear weapons built by the superpowers still exist, a few smaller countries may be attempting to build them, and terrorist organizations would like to have

some. This seminar will study the history of these weapons, as well as their design and construction using only information that is publicly available. It will also study the source of nuclear material and how it might be obtained by terrorist groups.

Joseph Kapusta is a professor in the School of Physics and Astronomy. His research specialties are in the areas of theoretical high energy nuclear and particle physics with occasional applications to cosmology and astrophysics.

THE PHYSICS OF SUPERHEROES James Kakalios, School of Physics and Astronomy PHYS 1905, Section 2 2 credits Tuesday, 9:05AM - 11:00AM 143 Physics, Minneapolis East Bank 66927

This seminar class will discuss basic principles of physics and chemistry as illustrated by their correct application in comic books. We will discuss how large the gravity on Krypton must have been in order to enable someone on Earth to leap tall buildings in a single bound. The principle of conservation of energy will be illustrated by considering the super speedster, the Flash. Are any of the X-Men's powers realistic? Plausible? Possible? And why can't Superman change history when he travels through time? After you learn what would really happen if a radioactive spider bit you, you'll want to sleep with the lights on! Math Level: High School Algebra and Geometry.

James Kakalios is a Professor in the School of Physics and Astronomy whose research interests include disordered semiconductors and pattern formation in sand piles. He has been reading comic books longer than he has been studying physics, and is a science consultant for Wizard Magazine (ever since he mathematically proved that Gwen Stacey died from a neck snap when Spidey caught her in his webbing). THE PHYSICS OF SUPERHEROES James Kakalios, School of Physics and Astronomy PHYS 1905, Section 3 2 credits Tuesday, 2:30PM - 4:25PM Phys 143, Minneapolis East Bank 66928

This seminar class will discuss basic principles of physics and chemistry as illustrated by their correct application in comic books. We will discuss how large the gravity on Krypton must have been in order to enable someone on Earth to leap tall buildings in a single bound. The principle of conservation of energy will be illustrated by considering the super speedster, the Flash. Are any of the X-Men's powers realistic? Plausible? Possible? And why can't Superman change history when he travels through time? After you learn what would really happen if a radioactive spider bit you, you'll want to sleep with the lights on! Math Level: High School Algebra and Geometry.

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THE DEVELOPMENT OF
PSYCHOLOGICAL STRENGTHS
Michael Steger, Psychology
PSY 1905, Section 1
3 credits
Tuesday and Thursday, 11:15AM – 12:30PM
N391 Elliott Hall, Minneapolis East Bank
67425

In this seminar, we will explore what humans do well and what makes us happy, in contrast to the focus on pathology and negative aspects of human experience that is the focus of most of psychology. We will consider topics such as the function of positive emotion, happy marriages, growth following traumatic events, altruism, meaning in life, and resilience in childhood. The course is interactive and will include a fair amount of experiential education.

Michael Steger has a joint specialization degree in Counseling and Personality Psychology. In addition to researching well-being, particularly what makes life feel meaningful, he has worked as a therapist. He is passionate about sharing with students the wealth of information, both research and clinical, he has gathered on how to achieve "the good life."

MOVIES AND MADNESS: MEDIA
PORTRAYALS OF ABNORMAL
PSYCHOLOGY
Monica Luciana, Psychology
PSY 1910W
3 credits
CLE: Writing Intensive
Wednesday, 9:45AM – 12:30PM
N119 Elliott Hall, Minneapolis East Bank
67388

People are captivated by what they read in newspapers, by TV shows, and by characters portrayed in popular films. Many of these portrayals are compelling because they depict extremes of human behavior that do not necessarily affect all people, but represent struggles that prevail in times of distress or adversity. Oftentimes, this distress is due to the presence of a psychological disorder. In this seminar, we will examine film portrayals of psychological disorders to explore the basic descriptive aspects of abnormal psychology. We will read modules from the current Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV: the primary manual that is used by clinicians to diagnose psychological and psychiatric conditions), watch a film, and discuss the correspondence between the film portraval and how the specific disorder in question is described in the DSM-IV.

Monica Luciana's research uses experimental neuropsychological techniques to examine functions controlled by the brain's prefrontal cortex, how these functions are modulated by brain chemicals such as dopamine and serotonin, and how this part of the brain develops in healthy adolescents. She teaches courses related to neuropsychological assessment, brain-emotion relations, and abnormal psychology. When she isn't working, Professor Luciana spends time with her family, and enjoys reading, Italian cooking, and movies.

INTOXICATED BY TECHNOLOGY:
COMPUTERS AND CULTURE
Victoria M. Mikelonis, Rhetoric Department,
RHET 1910W, Section 1
3 credits
CLE: Writing Intensive
Thursday, 4:05PM – 5:45PM
8 Magrath Library, St. Paul
67122

The purpose of this seminar is to investigate the impact of computers on modern culture from a humanist perspective. We will examine the anthropomorphizing of the computer and the digitalization of man; we will examine the effects of instantaneous communication, the blur in the workplace, and the "disappearance" of national boundaries; we will study the way men and women in the electronic age think about themselves and the world around them. The course will include readings from books, articles, film and the Internet that will be discussed in class and reflected on in short papers and oral presentations.

By examining different views of computers and their impact on culture, the students will learn (1) to analyze, critique and construct arguments, (2) to write short position papers in which they take a stand and defend it based on their readings and discussions, (3) to present their findings in short oral presentations and panel discussions with other students.

Students will write three short reflection papers (7–8 pp.single-spaced) and present them to the class. They will also participate in a panel discussion on topics to be chosen by 3–4 person groups in consultation with the instructor. They will compose a panel paper in lieu of a final exam.

Victoria M. Mikelonis. is a professor in Rhetoric and Director of the Undergraduate Program in Scientific & Technical Communication. She has been involved in developing courseware, teaching face-to-face and online courses, and is currently developing an online course on the Essentials of Grammar, Usage, and Punctuation. She has done considerable work in intercultural communication both in the U. S. and in Central and Eastern Europe and has been instrumental in internationalizing the U of M curriculum with the Office of International Programs and the Center for Teaching and Learning Services.

(RE)DESIGNING THE WORLD: FROM WORLD FAIRS TO THE EPCOT CENTER C. Lance Brockman, Theatre Arts TH 1905, Section 1 3 credits Tuesday and Thursday, 9:05AM – 11:00AM 275 Rarig Center, Minneapolis West Bank 67979

America's distinct popular culture is rooted in the traditions of 19th century theatre. In this seminar, we will explore the technological innovations and theatrical artistry that have defined many Americans' understanding of and visual perspectives on the "cultures and history of the world." We also will work hands-on with the decorative and pictorial techniques that helped create much of that interpretation.

Lance Brockman's scholarship focuses on the theatrical techniques used to create 19th and 20th century popular culture (panoramas/cycloramas, circus performances, vaudeville, fraternal initiation, etc.). He is noted both for visual presentations of this material and for teaching the pictorial techniques used by scenic artists to create an illusionary world with paint and decoration. Professor Brockman lectures across the country on the subject of drawing and painting for the designer: The Historical Method. Results of his research can be seen at http://digital.lib.umn.edu/scenery/.

LIVE THEATRE—ENTERTAINMENT WITH ATTITUDE
David Bernstein, Theatre Arts
TH 1911W, Section 1
CLE: Writing Intensive
Thursday, 6:30PM – 9:30PM
Performance lengths may vary
550B Rarig Center, Minneapolis West Bank
56752

This seminar will introduce non-theatre majors to the richness and diversity of live theatre, through performance and text. We will attend performances at a variety of Twin Cities theatres and use this experience to develop a critical eye and a critical language for thinking about live performance. Our viewing will be supplemented by in-class discussions and talks with theatre and dance professionals.

David Bernstein has thirty years of professional management and artistic experience in the nonprofit theatre world. He is a founding member of the Attic Theatre in Detroit and founder/managing director of the Performing Network in Ann Arbor.