



Commons Seminars

Universities nowadays are about finding new horizons and redefining old boundaries. Would you like to study at the interface of music and psychology with the director of our Center for Teaching? How about discussing the future of energy with the Dean of Engineering? Maybe you would like to work with a professor who is thinking about theater and the environment. Or maybe a computer scientist at the National Science Foundation who would like to interact with you on line. Would you like to be in a seminar that brings together in one room the different takes of a poet, a pre-med, an education major, a violinist, and an engineering student? If you answered yes to any one of these questions, you may want to enroll in an optional Commons Seminar, a new program that, with your participation and help, we are creating this year in The Commons.

Commons Seminars are special topics seminars held in classrooms of The Commons. They are open only to first-year students from any of the four undergraduate schools (Arts and Science, Blair, Engineering, and Peabody). They meet for approximately fifteen classroom hours over the course of the semester and earn one semester hour of academic credit. These seminars bring together professors and 15-20 students around a topic of general interest to all participants. It does not matter which school or college you are enrolled in. These seminars will be challenging, but there are no prerequisites. All seminars are open to all first-year students, no matter in which school or college you are registered.

There's bad news and good news, however. The bad news is that space is limited for the fall semester. Only eleven Commons Seminars will be offered in our first semester this fall, each enrolling only 15-20 of you, so not everyone will get their choice. It is not first-come/first-served, so don't worry about that. Once everyone makes their request, we will randomize the selection. If you don't get your choice, we will tell you in July and maybe you can select a second choice. The good news is that we will offer about twenty seminars in spring 2009 and YOU will have chance to work with your Head of House to propose topics and suggest faculty members that interest and challenge you.

But for fall 2008, give it a try. See the list below. Please know that Commons Seminars will not satisfy the requirement of a First Year Writing Seminar (3 credits) for students in the College of Arts and Science. The Commons Seminar is a free elective---an optional, one-hour course for any first-year student from A&S, Blair, Engineering, or Peabody. Check the list below and see what you want to do. It is entirely your choice.

Energy, Sustainability, and the Environment in the Popular Media

Theater 099 Section 1

R, 1:10 pm - 2:00 pm, Murray 206

Phillip N. Franck, Associate Professor of Theatre

Description: This seminar will explore issues of Energy, Sustainability, and the Environment raised in recent popular media. We will discuss films and books and how topics relating to ES&E are addressed. Films to be considered include *An Inconvenient Truth*, *Who Killed the Electric Car*, *Kilowatt Ours*, *A Crude Awakening*. Books include *Big Coal*, *The Power to Save the World*, *The Long Emergency*, *The End of Oil*, *Farewell My Subaru*, and even the Broadway musical, *Urinetown*. We will view and read these source materials, engage with their ideas by conducting research into the factual data they present and by perhaps presenting alternative ideas or approaches to the source material. We will discuss how we each use energy in our personal and academic lives, how that usage may be changing, and what the future holds for us. In the end, students will prepare and present a manifesto relating to their own energy and environmental impact. Questions to address are not only individual energy footprints, but also ideas for modifications as well as ways to motivate others to consider their own changes. **Credit: 1 semester hour**

The Future of Energy

ES 101 Section 6

W, 3:10 pm - 4:00 pm, Stambaugh 107

Kenneth F. Galloway, Dean and Professor of Electrical Engineering

K. Arthur Overholser, Senior Associate Dean and Professor of Biomedical Engineering and Chemical Engineering

Description: We will first examine current energy reserves and usage. Who controls fossil fuel reserves? Who uses them? When will reserves be depleted? We will then consider technical, economic, and geopolitical aspects of alternative energy sources, including solar, nuclear, wind, geothermal, and others. This seminar is not limited to science and engineering students and should be of interest to first-year students from all backgrounds and interests. The more variety we have, the more interesting our work will be. Since energy conservation is best expressed in symbolic terms, some degree of comfort with elementary algebra will be assumed, but all Vanderbilt first-year students should have that level of comfort. **Credit: 1 semester hour**

Stealing in Music City, U.S.A.: Solving the Problem of Music Piracy

MUSO 099 Section 1

T, 2:35 pm - 3:25 pm, The Commons Center - Conference Room 233

Holling Smith-Borne, Director of Music Library and Sara Manus, Music Librarian for Public Services

Description: Last year the Recording Industry Association of America (R.I.A.A.) began a massive legal campaign against college students to try to stop music piracy. Although this tactic has been widely criticized, the industry believes that this is the best option for enforcing its rights under U.S. Copyright Law. As a Vanderbilt student living in the midst of Music City, the debate about music piracy is particularly relevant. In this seminar, we will investigate the history of music piracy, identify the various stakeholders in the problem, and engage in discussion with guest speakers from the Nashville music industry, legal community, etc. By the end of the semester, you will propose your own solution for solving music piracy that has the potential to reinvent the music industry. **Credit: 1 semester hour**

Science and Engineering in Real Time

ES 101 Section 8

W, 4:10 pm - 5:00 pm, Stambaugh 107

Robert A. Weller, Professor of Electrical Engineering

Description: The pace of scientific discoveries today is dizzying and it is very easy even for a professional scientist or engineer to lose track of discoveries in other fields. This seminar will be based upon reading of the weekly publication *Science News*. Through a combination of instructor led discussions and student presentations we will explore the most important current developments in all branches of science, engineering, and medicine, with particular emphasis on topics related to global change, within days of their first public announcement. The goal is to gain an appreciation for the essential unity of scientific knowledge and for the relationship between discovery and applications of new knowledge. The seminar is open to anyone, and all are invited, but it will probably be of greatest interest to students considering a career in science, medicine, engineering or public policy. **Credit: 1 semester hour**

Environmental Ethics

ES 101 Section 10

T, 2:35 pm - 3:25 pm, Murray 206

Christopher J. Rowe, Director of Engineering Freshman Year and Lecturer in Engineering Science

Description: This seminar will begin with a brief introduction to common ethical theories in order to provide a framework for ethical problem solving concerning environmental issues. The seminar will involve discussions of the value-duty link to applied environmental ethics and the moral basis for environmentalism. A case-based approach will drive the seminar topics providing illustrative examples of applied environmental ethics (or more often the lack thereof) primarily in a technological context. Controversial issues involving politics, energy, food and population, and toxic chemicals will be emphasized. This seminar is not limited to science or engineering students, but a diverse mix of aptitude and background is highly desired. Prior knowledge of ethical theories is not required. **Credit: 1 semester hour**

Classical Musicians' Biopics: Theorizing Musicians' Biographies

MUSO 099 Section 3

Sunday, 3:00 pm - 6:00 pm, Stambaugh 107

Cynthia Cyrus, Associate Dean, Blair School of Music

Description: The popularity of “Amadeus” and “Immortal Beloved” and their sometimes egregious disregard of the truth make them a logical launching point for a semester devoted to exploring films that purport to be biographical representations of musicians. We’ll consider such films from a variety of angles, including veracity, metaphor, and the way in which creativity – and particularly musical creativity – comes to be portrayed. We will situate each film in its historical moment, and examine the way in which audience expectation shapes and sometimes limits the techniques available to the production team. Over the course of the semester, we will also consider various sub-genres: the more traditionally documentary, biographical romance, the costume drama, the child-friendly, and the madly creative. The semester’s agenda is to take on ten films; class time each week will include both a screening and discussion of the week’s film. Grades will be based on discussion, presentations, and a paper. **Credit: 1 semester hour**

Educating the World's Children: The OLPC (One Laptop Per Child)

ES 101 Section 11

M, 5:10 pm - 6:00 pm, The Commons Center - Conference Room 233

Lawrence W. Dowdy, Professor of Computer Science

Description: The OLPC initiative is a vision to educate children worldwide by developing and providing an inexpensive computer (i.e., “the \$100 laptop”, the XO, resembling a child when turned sideways,) specifically designed for young children. The XO has a rapidly expanding set of educational and entertaining applications, including photography, video, journaling, measurement, programming, and music composition abilities. The XO is specifically designed to be rugged and energy efficient for use in third world countries. This seminar is open to all first-year students and will be of interest to those from both technical and non-technical backgrounds. The seminar will explore a broad range of interrelated issues surrounding the OLPC initiative: political, technological, marketing, educational, economic, humanitarian, cultural, and energy. Grades will be based on seminar participation, written summaries of readings, and a semester project. **Credit: 1 semester hour**

The Nuclear Renaissance

ES 101 Section 7

M, 9:10 am - 10:00 am, Stambaugh 107

James H. Clarke, Professor of the Practice, Environmental Engineering

Description: The role and potential contribution of nuclear energy will be discussed within the context of existing and potential future contributions to meeting energy needs both within the U.S. and globally. Seminar content will include a brief history of nuclear power, conventional reactor designs currently in service; safety issues and reactor accidents e.g., Three Mile Island and Chernobyl , the challenge of nuclear waste management and the Yucca Mountain Project, socio-economic, cultural and political factors; and new reactor applications and approaches to managing nuclear waste (the Global Nuclear Energy Partnership). Professor Clarke, advisor to the Nuclear Regulatory Commission, is also lead instructor and developer of an environmental science capstone course on the deep geologic disposal of nuclear waste – the Yucca Mountain Project. Other Vanderbilt faculty experts and affiliated faculty will be invited to participate, based on student interests. Potential field trips and possibly one or more basic lectures will be coordinated with other seminar leaders as appropriate. **Credit: 1 semester hour**

The Environment and Genetically Engineered Organisms

ES 101 Section 9

W, 2:10 pm - 3:00 pm, Murray 206

Kevin T. Seale, Research Associate, Biomedical Engineering

Description: Plants and animals and their environment have modified each other since ever they first coexisted perhaps millions of years ago. Recent technology has enabled deliberate genetic engineering or re-engineering of earth's species by humans with promising opportunities for growth of industry, understanding of nature and perhaps longer and healthier lives for people. However, the complexity of organisms and their interaction with their environment and each other practically guarantee that unforeseen effects of species engineering will reverberate long after the first profits are realized. In the looming era of species marketing the mottos are not merely buyer and seller beware, but also *caveat humanae* (humans beware). In this course we will learn about genetically modified organisms (GMOs): How are GMOs created and who can they benefit? What makes them profitable? We will look at the sorts

of things could go or have gone wrong with GMOs, and how we might proceed boldly yet sensibly into this new scientific business. **Credit: 1 semester hour**

Music and Selfhood

MUSO 099 Section 2

R, 4:00 pm - 5:30 pm, Location: TBA

Allison Pingree, Director, Center for Teaching

Description: How does music shape who we are, emotionally, physically, spiritually and intellectually? This seminar is intended for anyone who is passionate about music, from performance majors to avid iPod listeners to instrumental dabblers to concert-going groupies. We'll pursue these issues through a combination of interdisciplinary discussion sessions and participation in a range of musical events, all focused on mining the power of experiential learning with and about music. For each unit, we establish a foundation through readings (drawing from psychology, religious studies, musicology, cultural studies, etc.) and conversations with visiting faculty guests, and then expand on that foundation through reflective writing and creative expression activities, and through participation in events. **Credit: 1 semester hour**

Computing, Sustainability and the Environment

ES 101 Section 12

W, 3:10 pm - 4:00 pm, Location: TBA

Douglas H. Fisher, Associate Professor of Computer Science and Computer Engineering

Description: Participants will explore issues relating to the burden of computing on the environment, and relief of burden on the environment that might be reaped from computing use. Thus, discussion goes beyond so-called 'green computing', which is concerned with minimizing the burden of computing manufacture, use, and disposal, and explores *how computing and related communications technologies can be part of larger sustainability strategies*. Each week, *prior to class*, students will be expected to read an article and to blog and to post to a Wiki on issues raised by the reading and their experience and ideas. Class (1 hour each week) will be open discussion and debate. The course Wiki and blogs can be revised and expanded following class. There will be a fixed meeting time but no meeting place. All participants will participate remotely, by different means from week to week: standard teleconference, Skype, standard video conferencing, web cams, webex, virtual worlds. Grading will be based, in part, on Wiki and blog contributions and class "attendance" (see above). A final project given about mid-semester will require student teams of 2-3 to estimate an ecological footprint (gross and net) of computing within a context – e.g., the Featheringill second floor computer lab for one year, 24hrs a day, 7 days a week, 52 weeks a year, based on actual conditions and what is possible with conservation. **Credit: 1 semester hour**