

--Energy and the Environment--
Fall 2007 Course Calendar
Professor Chris Gadomski
August 31, 2007

1. Sept 4th—PART ONE- “The problem” Introduction, discussion of semester project, class objectives and discussion of environmental issues. Watch *An Inconvenient Truth*.
2. Sept 11th—Setting the stage environmentally...Is global warming/climate change for real? Discussion of an *Inconvenient Truth*? What do Al Gore’s detractors say? Setting the stage for urgency. Assignment due: One-two page, double-spaced paper reviewing, *An Inconvenient Truth*. Is the science, and are the numbers, plausible? Does the message get across? How do people respond? Be prepared to discuss your views in class.
3. Sept 18th—Views from the Establishment, what does it say about climate change? Understanding vested interests, Assignment: Dessler & Parson’s book, *Global Climate Change*, Chapters 1-3. Critique WEC Publications, 2-3 page write up to be handed in September 25th.
4. Sept 25th—The Environment vs the Environment...It is not just about the Air. Park Lands for the People? Sierra Club against solar? Open Space vs, Energy security and clean air—the battle over wind in upstate New York. Also, Environmental Fear and Loathing in the Tar Sands. Paying the price for prosperity in China. Assigned reading: Dessler & Parson’s book, *Global Climate Change*, Chapters 4-5.
5. October 2nd—Global Warming/Climate Change—Fact or Fiction, What does 550 ppm mean? Is the climate changing, and are humans responsible. Spelling out greenhouse gases—what are they, which ones are the worst, from where do they come. How will public sentiment affect government policy? Assigned Reading For Class: Mark Maslin, *Global Warming*, Chaps 1-5. Review the International Panel on Climate Change Report, http://arch.rivm.nl/env/int/ipcc/pages_media/SRCCS-final/IPCCSpecialReportonCarbondioxideCaptureandStorage.htm
6. October 9th—“PART TWO—The Sources—Power Generation” Getting technical, Let’s take a close look at coal and natural gas. Understanding the technology, emissions, and looming solutions. How real are gasification options like IGCC and pulverized clean coal technology? Introduction to Carbon Sequestration. Assigned Reading: Mark Maslin, *Global Warming*, Chapters 6-10.

7. October 16th —The Sources—Transportation, A detailed look at the sector's contribution to global warming. America's mess...Is China next?
Assigned Reading For Class: Speth, Red Sky at Morning, Chapters 1-3
8. October 23rd —PART THREE--The Solutions-Conservation
Recognizing the importance of using less energy. A penny saved is a penny earned, a kilowatt hour saved, is less CO2 emissions.
Discussion of Conservation strategies, discussion of strategies to address a low carbon future. Presentation from the Alliance to Save Energy
Assigned Reading for Class: Pioneering the Low Carbon Future...Sustaining Livelihoods. Download from:
<http://www.smidirect.net/published/al%20gore.htm>
Speth, Red Sky at Morning, Chapters 4-7
9. October 30th —Mid-Term (Possible Take home—to be discussed.)
Nuclear Energy—Is it part of the solution, or part of the problem?
An in depth discussion on the pros and cons of nuclear power based upon its CO2 contribution to the environment. Also, a discussion on waste.
What to do with nuclear waste?
Assigned reading: Speth, Red Sky at Morning, Chapters 8-10
Also on nuclear energy, TBD
10. November 6th —Solar Energy, Wind, Biomass for Power Generation
What about renewables? Understanding these technologies. Are the technologies a panacea? Can they do the job, or are we kidding ourselves?
Should the market or government decide their fate? In class student presentation.
Assigned Reading for Class: Rifkin, pp 1-123
Gadomski, <http://www.smidirect.net/published/gimmeshelter.htm>
Gadomski, <http://www.smidirect.net/published/catchthecredits.htm>
11. November 13th—Biofuels / Ethanol / Hydrogen
Are these technologies a solution to the energy problem, or are they a solution to the environmental problem as well?
In class student presentations: TBD
Assigned reading:TBD
12. November 20th —Carbon Trading/ Revisit Carbon Sequestration/ A Sense of Urgency
What role will carbon trading play? Isn't it really smoke and mirrors?
13. November 27th— Working together—what can we do about emerging markets?
Assessing our own carbon footprint...what can we do about ourselves?
Planting a tree. The business of climate change.
14. December 4th—Final Exam