

12Energy Politics and Policy

Environmental Studies 142-Summer Session (2) 2015, UC-Santa Cruz

Class Meeting Times: Mon/Wed/Fri 9:00-11:30, Social Sciences 2 159

Instructor: Jeffrey Jenkins

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Office Hours: Mon/Wed 11:30-12:30

Course Description

This course will provide students with the fundamental concepts of energy politics and policy as they relate to the environment. The topic is vast given the ubiquity of energy use in our modern world and the myriad environmental challenges resulting from it, including pollution and climate change. Energy politics and policy transcend the multiple spatial scales where institutional governance and energy economics unfold, from international regulations, to national policies, state regulations, household consumption patterns, and guidelines for energy efficiency. As such not everything can be covered in one introductory course, however it's hoped that the attentive student will leave with a critical understanding of the environmental, economic, political, and social challenges facing the energy industry today.

Course Learning Objectives

1. Build a foundation and awareness for how energy and the environment are coupled through political, economic, and social systems of production and consumption.
2. Reinforce knowledge about the historical contingency of current energy policies and regulations, specifically as they relate to causal factors of extraction, land use change, pollution, the built environment, population growth and energy efficiency.
3. Increase critical understanding of human health risks, pollution and climate change resulting from energy extraction and production through quantitative analysis and qualitative assessments.

Grading and class requirements

Your final will be based on the following percentage point break down. Class participation includes attendance at each meeting and a willingness to participate in discussion or ask questions. Do note that it is extremely important that you attend every class or if you are unable to make a meeting then coordinate with other students on what material was covered. This is particularly important because the length of summer session is so short and the content covered in each class meeting so comprehensive that you will fall behind almost immediately if you end up missing a class. The current event presentation should be approximately 5-10 minutes (including time for questions/discussion) focused around a topic of your choosing related to the environmental policy or environmental politics of energy extraction or production, broadly defined. The policy brief will provide you with an opportunity to take on the role of a policy analyst who must write a report about the challenges of a particular energy issue to inform a policymaker. This will be a 2-3 page memo based on topics discussed in class with the instructor. The draft legislation and debate refers to the 2015 Energy Policy

Modernization Act, a bill that is currently being drafted in Congress. You will take on the role of congressional figures in two caucuses (Democratic and Republican) to create a unique version of the bill. The midterm exam will focus on material covered in the first half of the class. While the final exam will be cumulative, do take note that it will be heavily weighted towards the material covered in the second half of course. Further details on the current event presentation and policy brief as well as both exams will be presented in class by the instructor.

- 10% Class Participation
- 10% Current Event Presentation
- 15% Policy Brief
- 15% Draft Legislation and Debate
- 20% Midterm Exam
- 30% Final Exam

Course Policies

1. *Classroom interaction.* I encourage personal views and critical inquiry based on the material and topics at hand. Equally, I expect that the viewpoints of others will be respected. Consider this course and others throughout your tenure here at UCSC to be valuable practice to engage with your peers through professional communication and scholarly discourse.

2. *Special accommodations.* Students who need special accommodations are required to submit the form to me in person, preferably outside of class (e.g. office hours) within the first two weeks of the quarter. If you will be requesting academic accommodations, you must first contact the Disability Resource Center (<http://www2.ucsc.edu/drc>) to make arrangements. Any other accommodations, questions, or situations should be directed to me during first week.

3. *Academic integrity.* The University has established codes concerning proper academic conduct and the consequences resulting from improper behavior. Please be aware of these policies. The Official University Policy on Academic Integrity for Undergraduate Students can be found at the following link:

http://www.ucsc.edu/academics/academic_integrity/undergraduate_students/

4. *Life as a UCSC Student.* Your course facilitators are aware of the many pressures we all face as members of the UCSC community, as colleagues in the Department of Environmental Studies, and as fellow human beings moving through the unique campus landscape. There are many campus services specifically suited to help you throughout your undergraduate career, please take advantage of your resources, including: including academic advising in the Department of Environmental Studies (<http://envs.ucsc.edu/undergraduate/>), the Student Health Center <http://www2.ucsc.edu/healthcenter/>, and Campus counseling and psychological services <http://www2.ucsc.edu/counsel>.

Course Materials

Peter Asmus. 2009. Introduction to Energy in California. University of California Press. (Asmus)

- The Asmus book is available from the Literary Guillotine (204 Locust Street in downtown Santa Cruz; phone: 831.457.1195; open Monday-Saturday, 10am-6 pm).

National Research Council. 2010. Hidden Costs of Energy: Unpriced Consequences of Energy Production and Use. Washington, DC: The National Academies Press. (NRC)

- This entire report and individual chapters are available to download for free at: http://www.nap.edu/catalog.php?record_id=12794

Class Schedule

****All topics/dates/assignments are subject to revision based on instructor decisions**

Monday, July 27th: Introduction – Policy vs. Politics

- Course introduction/syllabus overview
- What do we mean by “politics” and how does this compare with “policy” related to energy and the environment?
- Begin movie: “There will be blood”

Wednesday, July 29th: History of conventional energy in California

- Asmus – “Overview: From indigenous stewardship to millennial crisis” (pp. 1 – 85)
- Energy Policy Modernization Act 2015 Executive Summary
- Finish movie: “There will be blood”

Friday, July 31st: California conventional production and energy transmission trends

- Asmus – “Mainstays: Electricity and fossil fuels” (pp. 86-133)
- In class presentation: California Energy Commission trends (from website)
- Read various articles and lobbying letters on 2015 EPMA
- **Introduce your congressional role**

Monday, August 3rd: Renewable alternatives, future challenges and energy innovation

- Asmus – “Alternatives: The growth of renewable energy” (pp. 134-227)
- New York Times editorial perspectives – “Green Civil War: Projects versus Preservation”
- Zweibel – Solar Grand Plan
- “Solar energy isn’t always as green as you think” – Dustin Mulvaney
- In class presentation: California Energy Commission – “Clean Energy Tour”
- **Meet in caucuses and begin to draft energy legislation**
- *Current event presentations*

Wednesday, August 5th: Energy Innovation and efficiency gains

- Asmus – “ Innovation: The search for solutions” (pp. 286 -323)
- The Economist - “Energy efficiency - Green around the edges”
- Deitz, PNAS – “Altruism, self-interest, and energy consumption”
- *Current event presentations*
- **Each congressional member should have “top asks”**

Friday, August 7th: Normal accidents – Nuclear energy and earthbound systems

- Perrow, C. (2011). “Chapter 2: Nuclear Power as a high-risk system – why we have not had more TMIs but will soon” and “Chapter 7: Earthbound systems: Dams, Quakes, Mines, and Lakes” in *Normal accidents: Living with high risk technologies*. Princeton University Press.
- Center for analysis of risk and regulation. 2014. “In the shadow of Tomioka: On the institutional invisibility of nuclear disaster”. The London School of Economics and Political Science.
- Chambers - “Report on Mount Polley Tailings Storage Facility Breach, Independent Expert Engineering Investigation and Review Panel”
- *Current event presentations*

Monday, August 10th: Hydraulic fracturing in the U.S.

- EPA draft assessment on hydraulic fracturing impacts and related critique
- New York Times articles (links on ecommons)
- “Boom and Bust Methodology: Opportunities and challenges with conducting fieldwork at sites of resource extraction” – Jenkins et al. 2015
- **Caucuses should have their own versions of draft bill**
- *Current event presentations*

Wednesday, August 12th: Keystone XL pipeline and oil geopolitics

- Keystone XL Final Supplemental Environmental Impact Statement (SEIS)
- Funk, M. 2014. “The wreck of the Kulluk”. The New York Times. Dec 30, 2014.
- The Economist. 2014. “Cheaper oil: Winners and losers”. October 25th, 2014.
- The President and the Pipeline – The New Yorker
- *Current event presentations*

Friday, August 14th: Midterm exam

- **Midterm exam** (All material covered up to this point)

Monday, August 17th: Legislative debate and the case for/against regulation

- Perrow, Charles. (2015) Cracks in the "Regulatory State". *Social Currents* 2(3): 203-212.
- “Why coal should not be saved” - Energy in context
- Supreme Court ruling blocking Obama Administration power plant emission limits
- **Debate Energy Policy Modernization Act as class**

- *Current event presentations*

Wednesday, August 19th: Hidden Costs of Energy – Introduction and Electricity

- NRC – Summary, Chapter 1: Introduction, Chapter 2: Energy for Electricity (pp. 1-153)
- *Current event presentations*

Friday, August 21st: Hidden Costs of Energy – Transportation and Conclusions

- NRC –Chapter 3: Energy for transportation (pp. 154-221)
- Department of Transportation – Climate change and transportation
- NRC –Chapter 7: Overall conclusions and recommendations (pp. 337-371)

Monday, August 24th: Social Cost of Carbon

- Social Cost of Carbon Technical Document – Environmental Protection Agency
- "Omitted Damages: What's Missing From the Social Cost of Carbon" Cost of Carbon
- **Policy brief due**

Wednesday, August 26th: Responses to extractive development

- Jenkins, J. 2015. Extractive mineral development across the American west: Using a regional political ecology framework to understand the future of Old West industries. *Journal of Political Ecology*.
- *High Country News* – “Why rare earth mining in the West is a bust”
- Videos: "Red Gold" and "Rare Earth"

Friday, August 28th: Final Exam

- **Final exam** (Primarily 2nd half of course but all material is fair game)