Course: SIOC 292
Instructor Erik M. Conway, emconway@ucsd.edu
Winter 2016
Revised 22 January 2016

Syllabus

Pre-assignments: Please take the time to watch these videos (free, on YouTube):

Richard Alley: https://www.youtube.com/watch?v=RffPSrRpq_g
Naomi Oreskes: https://www.youtube.com/watch?v=2T4UF_Rmlio
Kevin Anderson: https://www.youtube.com/watch?v=rE7v7n4QVc

And also peruse Spencer Weart’s Discovery of Global Warming’s website:
https://www.aip.org/history/climate/index.htm
Especially the Summary; The Carbon Dioxide Greenhouse Effect; Theory sections

Books to buy/rent:


Focus: The goal of this course is to familiarize students with the policy history of climate change, and given them an in-depth understanding of climate policy options as they’ve been discussed in policy-related literature.

Proceedings: Our class period is three hours long. That’s far too long for lecturing! I plan to lecture for no more than 90 minutes per period. I may use some of that time for videos; if I can identify a good guess lecture, I will use the time for that. At least 30 minutes of each class will be discussion of readings. Come prepared!

Finally, the assignments emphasize writing. As potential future policy people, you will be expected to be able to summarize an argument or set of facts into a briefing, or to write a “white paper” for your boss. Being able to express yourself clearly and succinctly matters!

Assignments: There will be 3 essay assignments due in class and a final paper. They will be:

Assignment 1: 3-5 page essay on why you’re in the class and what you hope to get out of it.
Assignment 2: Essay Review. This will be a review of several books on a theme (related to this course) that you choose. Possibilities include: Geoengineering; the future role of nuclear power for climate mitigation; Is the 2C “limit” possible?; the ethics of discounting; modeling in the climate casino. MANY other themes are possible—this is a broad, rich subject. Style should be like that of the New York Review of Books. ALSO: create a briefing to accompany your essay. You’ll have 5 minutes in class to present it.

Some suggested books are listed at the end of the syllabus. Length should be 2000-3000 words. (Smart students will use this essay to help with Assignments 3 and 4).

Assignment 3: Draft of your final paper (!) See assignment 4 below.

Assignment 4: Final Paper. I expect a paper of roughly 7500 words on some aspect of climate policy. It can be a: review and analysis of the Regional Greenhouse Gas Initiative; a critique of the use of models in policy formulation; a history of the (new) 1.5C “limit”; the ethics of geoengineering; growth as a policy problem. . . I could go on nearly forever. You should talk to me about your choice early in the course.

NOTE: Week 10 is student presentations. You will present your final paper to the class. Length TBD.

Class Schedule

Week 1 [January 8]: Introduction; A brief history of climate science

Readings: See pre-assignment above.

Suggested additional reading: Merchants of Doubt, chapter 6 and Conclusion

Week 2 [January 15]: First Assignment Due! Early efforts towards climate policy

Jamieson, Ethics and the Environment, Chapter 2 and 3.


Dessler and Parsons, The Science and Politics of Global Climate Change (2nd): Chapter 4

Nordhaus, Climate Casino, chapter 17


Week 3 [January 22] Modeling Climate: Physical and Economic

Guest Lecture by Richard Somerville, Scripps Emeritus.
Jamieson, Chapter 4.


**Suggested:** If you’re really into economic models of climate, peruse Nordhaus, “ A Question of Balance (listed below), and check out the website he maintains on his DICE model of climate economics. [http://www.econ.yale.edu/~nordhaus/homepage/](http://www.econ.yale.edu/~nordhaus/homepage/)


**Week 4 [January 29] Assignment #2 Due. Student Presentations**

**A brief history of the IPCC.**

Samuel Randalls, History of the 2C Climate Target, WIREs Climate Change, July.August 2010, 598-605, doi 10.1002/wcc.62.


**Week 5 [February 5] Precautionary principles, intergenerational ethics, and developmental rights in the climate brew**

Jamieson, chapter 5 and 6.

Nordhaus: chapter 16, 18-20.

Laudato Si (aka the Papal Encyclical on Care for our Common Home)


**Week 6 [February 12]: Assignment 3 Due.**

**How we got here: the Fossilization of Energy**


http://thinkprogress.org/climate/2013/11/04/2882671/nuclear-power-climate/


**Week 7 [February 19] U.S. Energy and Climate Policies**

Moving backward: Kyoto Withdrawal and “All of the Above”


Massachusetts et.al. vs. EPA, No. 05-1120, April 2, 2007.


**Week 8 [February 26]: The De-Fossilization of Energy (?)**

MacKay, Sustainable Energy—Without the Hot Air. Available at: www.withouthotair.com. (The ten-page synopsis given here is the required reading, but I’d suggest spending a little more time than that—chapter 30’s important!)


Mark Z. Jacobson’s http://thesolutionsproject.org/

**Week 9 [March 4]: The Paris Accord**


The Collapse of Western Civilization: A View from the Future

Week 10 [March 11]: Assignment #4 Due! Student Presentations

References and Additional Readings


Herman Daly, Beyond Growth: The Economics of Sustainable Development (Beacon Press, 1997).


Kerry Emanuel, What we Know About Climate Change (MIT Press, 2007).


Naomi Klein, This Changes Everything (Simon & Schuster, 2015)


William Nordhaus, A Question of Balance (Yale University Press, 2008).


Naomi Oreskes and Erik M. Conway, Merchants of Doubt (Bloomsbury USA), 2010.

Henry Pollack, A World Without Ice (Avery Group, 2009).


Gus Speth, The Bridge at the end of the World: Capitalism, the Environment, and Crossing from Crisis to Sustainability (Yale University Press, 2009).

Spencer Weart, The Discovery of Global Warming (online text).