

Environmental Economics & Policy

Carleton College
Winter 2010

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Office Hours: To Be Determined

Course Description

This course will explore the economic and political institutions affecting the environment. The major questions of the course will be: When are individual economic incentives aligned with society's environmental interests and when are they not? How can policies and regulations be set to best accomplish environmental our shared goals? Will the continued economic development of economies like India and China lead to more or less environmental destruction? How can we best balance costs and benefits over long time horizons as we must in issues of non-renewable resource management and climate change?

Course Goals

The primary goal of this course is to learn how to assess environmental policy issues from an economic perspective. Other learning goals include increased capacity to 1) assemble, organize, analyze and present data in both oral and written form and 2) work in teams to accomplish these goals.

Course Overview

We will focus on issues of climate change, land use, water, transportation, energy, population and sustainability. These topics are inherently interdisciplinary and as such students will find introductory courses in microeconomics, political science, environmental studies, statistics and geospatial analysis to be very helpful. While these courses will help provide a level of background knowledge, they are not required as there are no prerequisites for this course.

Over ten weeks there will be a mixture of lecture, full class discussion, computer labs, small group work, and student presentations.

Grading

Your grade for the course will be based on a midterm exam, six assignments, course participation and a final policy project.

Citizenship **10%**

I consider citizenship to be a vital part of the course. A few of the characteristics of good citizens are: attend all of the course meetings, use office hours, ask questions, answer questions, listen attentively to others while they are speaking, post to the course online forums. Citizenship is more a function of quality rather than quantity.

Exam **20%**

There will be a take-home exam during which you will be responsible for the course material covered up to that point. It will be a combination of numerical problem solving, short answer and essay questions. The exam will be open-note and open-book but must be completed on your own without help from anyone else.

Final Policy Project **25%**

Your final project for the course is to conduct a policy analysis of a local environmental issue. The tentative issue this term is the decision facing the Northfield City Council of whether or not to annex nearby lands into the city to allow the landowners to build new housing. You will work in teams throughout the second half of the course to assemble and analyze data relevant to the problem. Your final deliverable is a round-table discussion during the final exam period. Each team will be expected to make a short presentation (<10 minutes) outlining your recommendations as well as question other team proposals

Assignments **45%**

There will be six assignments throughout the course worth a total of 45% of your final grade. The due dates of the projects will depend on our progress through the material. You can learn more about each of the assignments on the assignments sheet (separate document).

The Bet (5)

Is Economic Growth Bad for the Environment? (5)

Should I buy a hybrid? (10)

Tradable Permit Simulation (5)

Debate (5)

GIS Housing Project (15)

Course Calendar

Week 1 - January 7

Introduction to the Course, Thinking Like an Economist

Week 2 - January 12 & 14

Economic Basics, Cost-Benefit Analysis Intro

Cost-Benefit Analysis Project - Should I Buy a Hybrid?

Week 3 - January 19 & 21

Property Rights and Externalities – NIMBY and BANANA

Population and Sustainability – Is it even possible?

Week 4 - January 26 & 28

Water – Issues of Quantity and Quality

Water – A Right or a Privilege?

Week 5 - February 2 & 4

Standards vs. Taxes vs. Permits Simulation

Energy – Are we running out of oil? Is that a good thing?

Week 6 - February 9 & 11

Climate Change – Tax vs. Cap & Trade

Transportation – CAFE vs. Gas Tax?

Week 7 - February 16 & 18

Agriculture – Food vs. Fuels

Agriculture – Should I be a locavore? And Introduction to Final Project

Week 8 - February 23 & 25

Land Use – Should we preserve open-space? How?

Land Use - in and around Northfield

Week 9 - March 2 & 4

Land Use - in and around Northfield (continued)

Work on Final Projects

Week 10 - March 9

Work on Final Projects

Final Exam Period - March 15: 8:30am - 11am

Roundtable Discussion

Resource Materials

Textbook

Tietenberg, Tom and Lynne Lewis. Environmental Economics and Policy. Addison-Wesley. 6th Edition. 2010. This will be the primary text for the course.

Other Readings

Lasn, Kalle. True Cost. Adbusters, July 15, 2009.

Pollan, Michael. "No Bar Code: An evangelical Virginia farmer says a revolution against industrial agriculture is just down the road." Mother Jones, May 1, 2006.

Specter, Michael. "Big Foot: In measuring carbon emissions, it's easy to confuse morality and science." The New Yorker, February 25, 2008.

Dubner, Stephen and Steven Levitt. "Unintended Consequences: The Case of the Red-Cockaded Woodpecker." New York Times, January 20, 2008.

Simon, Julian. "Resources, Population, Environment: An Over-supply of False Bad News," Science, 208, June 27, 1980, pp. 1431-1437.

----- "Environmental Disruption or Environmental Improvement?" Social Science Quarterly, Vol. 62, No. 1, March, 1981, pp. 30-43.

Ehrlich, Paul. "An Economist in Wonderland." Social Science Quarterly 62(March): 45-49. 1981.

Topical Movies

Cadillac Desert – Water and the Transformation of Nature

The Prize: The Epic Quest for Oil, Money, and Power.

Who Killed the Electric Car?

Our Daily Bread

King Corn