NEW ECONOMIC SCHOOL
Masters in Energy Economics

Environmental Policy

4th Module, 2017-2018 Academic Year

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Course information

Course Website: my.nes

Instructor's Office Hours: After each class

Class Time: Wednesdays, various times

Room Number: TBD

Course description

This course explores the proper role of government in the regulation of the environment. It will help students develop the tools to estimate the costs and benefits of environmental regulations. A major component of the course will be the analysis of several environmental problems from a multidisciplinary aspect. These tools will be used to evaluate a series of current policy questions, including: Should air and water pollution regulations be tightened or loosened? What are the costs of climate change in the U.S. and abroad? Is there a "Race to the Bottom" in environmental regulation? What is "sustainable development"? How do environmental problems differ in developing countries? Are we running out of oil and other natural resources? Should we be more energy efficient?

Course requirements, grading, and attendance policies

The course requirements and grading weights are:

15-minute in-class quizzes: 20%

One hour midterm: 30%

Take home exam: 50%

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Course contents

1. Introduction and Framework for Analysis

Introduction

- Some Background: Trends in Environmental Policy and Quality, Worldwatch Institute, Vital Signs – 2011, "Energy and Environment Trends", pp. 39-46.
- "Collapse" Jared Diamond, Ch. 2
- Edward Wong, "As Pollution Worsens in China, Solutions Succumb to Infighting," New York Times March 21, 2013

Externalities, Market Failures, and Welfare I:

Nature of Market Failure
Efficiency Impacts of Alternative Policy Instruments

- Callan, Scott J. and Janet M. Thomas, Environmental Economics and Management (fifth edition)
- Thomson South-Western, 2010. Ch. 3, pp. 61-70; ch. 5, pp. 98-110.
- Goulder, Lawrence. "Impacts of Emissions Taxes, Abatement Subsidies, and Mandated Technologies." Notes prepared for Economics 155, December 2011.

Externalities, Market Failures, and Welfare II:

Distributional Considerations
Tradable Emissions Allowances

2. Local and Regional Air Pollution Problems

Tradable Emissions Allowances in Practice

- Goulder, Lawrence. "Markets for Pollution Allowances: What Are the (New) Lessons?"
- Journal of Economic Perspectives 27(1), Winter 2013.
- Kolstad, Charles D., Environmental Economics, ch. 6, pp. 99-105, 107-109.

3. Global Environmental Problems: The Greenhouse Effect, Stratospheric Ozone Depletion, and Transnational Acid Rain Deposition

Economic Perspectives on the Prospect of Global Climate Change
Global Climate Change: Domestic Policy Options

Perspectives on Recent U.S. National and State-Level Climate Policy Initiatives

- Recommendations for Designing a Greenhouse Gas Cap-and-Trade System for California,
- Recommendations of the Market Advisory Committee to the California Air Resources Board, June 2007. Chapter 2.

International Approaches to Addressing Global Climate Change

- Nordhaus, William. "To Tax or Not to Tax: Alternative Approaches to Slowing Global Warming." Review of Environmental Economics and Policy 1(1), Winter 2007. Excerpt: pages 30-39.

- Olmstead, Sheila, and Robert N. Stavins. "Three Key Elements of a Post-2012 International Climate Policy Architecture." Review of Environmental Economics and Policy 6(1), Winter 2012.

4. Environmental Issues in Developing Countries

Sustainable Development: Defining and Measuring Sustainability

- Solow, Robert M. "Sustainability: An Economist's Perspective," in Robert N. Stavins, ed.,
- Economics of the Environment: Selected Readings, fourth edition (London: W.W. Norton),
- 2000, pp. 131-140.
- Arrow, Kenneth, et al., "Are We Consuming Too Much?" Journal of Economic Perspectives, Summer 2004. pp. 147-155, 159-169.
- Wackernagel, Mathis, et al., "Tracking the Ecological Overshoot of the Human Economy," Proceedings of the National Academy of Sciences July 9, 2002, pp. 9266-71.

Sources of Unsustainable Economic Paths; Policies to Promote Sustainability

5. Open Access Problems, Overharvesting, and Extinction

Fisheries : Open Access, Market Failure, and Government Failure

- Pauly, Daniel. "Aquapalypse Now: The End of Fish." The New Republic, September 28, 2009.
- "Oceans of Abundance: An Action Agenda for America's Vital Fishing Future." Environmental Defense Fund, 2010.
- Schein, Andrew, "Owning a Piece of a Fishery: The Tradable Permits Approach in Alaska's Halibut Fishery"
- Levy, Sharon. "Catch Shares Management." BioScience, November 2010.

6. Valuing the Environment

Valuing Nature: Philosophical Bases of Value

Empirical Methods for Assessing the Value of Environmental Amenities - I

- Goulder, Lawrence H., and Donald Kennedy. "Interpreting and Estimating the Value of
- Ecosystem Services," in Gretchen Daily et al., eds., Natural Capital: Theory & Practice of
- Mapping Ecosystem Services. Oxford: Oxford University Press, 2011.
- Mendelsohn, Robert, William Nordhaus, and Daigee Shaw, "The Impact of Global Warming on Agriculture: A Ricardian Analysis." American Economic Review 84(4), September 1994.
- Goodstein, Eban, Economics and the Environment (fifth edition), ch. 8, sections 8.1, 8.4, and 8.6-8.8.

7. Population Growth, the Environment, and the Long Run

Population Growth: Sources and Policy

- Das Gupta, Bongaarts, and Cleland, "Population, Poverty, and Sustainable Development: A
- Review of the Evidence," 2011; pp. 2, 7-15.
- Goulder, "Population Growth, Resource Scarcity, and Per-Capita Welfare," notes prepared for
- Economics 155, March 2012.

8. Conclusions

The Environmental Future: Key Analytical Themes, Key Policy Challenges

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[This section should contain a list of topics/themes, discussed in the course, information on the format of classes, class materials, etc.]

Description of course methodology
The course will be based on lectures, with occasional in-class quizzes.

Sample tasks for course evaluation

A typical midterm question might be to describe the pros and cons of big-game hunting. A recent final exam had students explaining the environmental impact of prepping and homesteading.

Course materials

Required textbooks and materials

The course will be taught mainly from my slides, but students can consult "A Course in Environmental Economics: Theory, Policy, and Practice" by Daniel J. Phaneuf Till Requate (2017).

Academic integrity policy

Cheating, plagiarism, and any other violations of academic ethics at NES are not tolerated.

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