

# **Economics 30 / Environmental Studies 30**

## **Environmental Economics and Policy**

### **Course Overview**

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#### Course Description:

Econ 30 will examine the uses and limitations of economic analysis in dealing with many of the environmental concerns of our society. Public policies concerning the environment will be evaluated as to their ability to meet certain economic criteria.

The course will begin by developing the economic tools necessary for an analytical study of environmental concerns and policies. The second half of the course will apply this knowledge. Topics may include air pollution, water pollution, solid waste and recycling, climate change, and the interactions between international economic development and the environment.

#### Lecture Topics and Required Readings:

- **Introduction to Environmental Economics**

Stavins Essay 1, pgs. 3-8. *How Economists See the Environment*, Don Fullerton and Robert N. Stavins.  
Callan and Thomas Chapter 1.

- **Economic Principles Review**

Callan and Thomas Chapter 2.

- **Market Failures and the Environment I: Public Goods and Common Property Resources**

Callan and Thomas Chapter 3.  
Stavins Essay 2, pgs. 9-22. *The Tragedy of the Commons*, Garrett Hardin.

- **Market Failures and the Environment II: Externalities**

Stavins Essay 3, pgs. 23-49. *The Problem of Social Cost*, Ronald Coase.  
Krugman, Paul. "Earth in the Balance Sheet: Economists go for the Green," *Slate*. April 17, 1997. Available at <http://web.mit.edu/krugman/www/green.html>.

- **Internalizing externalities through Conventional Solutions: Property Rights and Command and Control Strategies**

Callan and Thomas Chapter 4.

- **Internalizing externalities through Market-Based Instruments: Taxes, Subsidies, and Tradeable Permits**

Callan and Thomas Chapter 5.

Stavins Essay 15, pgs. 279-301. *Economic Instruments for Environmental Regulation*, Tom H. Tietenberg.

Stavins Essay 17, pgs 334-354. *What Can we Learn from the Grand Policy Experiment? Lessons from the SO<sub>2</sub> Allowance Trading*. Robert Stavins.

Stavins Essay 18 and replies, pgs. 355-358. *It's Immoral to Buy the Right to Pollute*, Michael J. Sandel. Replies by Steven Shavell, Robert N. Stavins, Sanford Gaines, and Eric Maskin.

- **Environmental Decision-Making and Cost-Benefit Analysis**

In Class Handouts on Discounting

Callan and Thomas Chapter 9.

Stavins Essay 13, pgs. 255-259. *An Eye on the Future*, Lawrence Goulder and Robert Stavins.

Stavins Essay 12, pgs. 249-254. *Is There a Role for Cost-Benefit Analysis in Environmental, Health, and Safety Regulation?*, Kenneth J. Arrow et al.

Stavins Essay 14 and replies, pgs. 260-275. *Cost-Benefit Analysis: An Ethical Critique*. Steven Kelman. Replies by James V. Delong, Robert M. Solow, Gerald Butters, John Calfee, and Pauline Ippolito.

Stavins Essay 31. pgs. 616-648. *Environmental Regulation in the 1990s: A Retrospective Analysis*. Robert Hahn et al.

- **Cost-Benefit Analysis: Measuring the Costs**

Callan and Thomas Chapter 8.

- **Cost-Benefit Analysis: Measuring Environmental Benefits I  
Averting Behavior, Travel Cost, Hedonic Analysis, Contingent Valuation, Dose/Response,  
Benefits Transfer**

Callan and Thomas Chapter 7.

Stavins Essay 11, pgs. 223-245. *The Value of Life in Legal Contexts: Survey and Critique*, W. Kip Viscusi.

Stavins Essay 7, pgs. 129-145. *The Contingent Valuation Debate: Why Economists Should Care*, Paul Portney.

Stavins Essay 8, pgs. 146-172. *Valuing the Environment through Contingent Valuation*, W. Michael Hanemann.

Stavins Essay 9, pgs. 173-193. *Contingent Valuation: Is Some Number Better than No Number?*, Peter A. Diamond and Jerry A. Hausman.

Stavins Essay 10, pgs. 194-222. *Contingent Valuation and Lost Passive Use: Damages from the Exxon Valdez Oil Spill*. Richard Carson, et al.

- **Air Pollution: Introduction, Policy, and Evaluation**

Callan and Thomas Chapters 10, 11, & 12.

Stavins Essay 29, pgs. 547-592. *The Choice of Regulatory Instruments in Environmental Policy*. Nathaniel Keohane et al.

- **Global Air Pollution: Stratospheric Ozone and Global Climate Change**

Callan and Thomas Chapter 13.

Stavins Essay 22, pgs. 445-461. *Reflections on the Economics of Climate Change*. William D. Nordhaus.

Stavins Essay 23, pgs. 462-468. *The Costs of Combating Global Warming: Facing the Tradeoffs*. Thomas C. Shelling.

Stavins Essay 25, pgs. 479-502. *The Role of Economics in Climate Change Policy*. Warwick McKibbin and Peter Wilcoxon.

Stavins Essay 21, pgs 423-443. *Creating Incentives for International Cooperation: Strategic Choices*. Scott Barrett.

- **Water Pollution: Introduction, Policy and Evaluation.**

Callan and Thomas Chapter 14 and 15.

- **Solid and Hazardous Waste Management: Introduction, Policy and Evaluation.**

Callan and Thomas Chapter 17.

- **International Trade, Economic Development, and the Environment**

Stavins Essay 19, pgs. 359-398. *The Environment and Globalization*. Jeffrey Frankel.

Stavins Essay 20, pgs. 399-422. *Confronting the Environmental Kuznets Curve*. Susmita Dasgupta et al.

Lomborg, Bjorn. "The Environmentalists are Wrong," *The New York Times*. August 26, 2002.