

WSBES174 – Environmental Policy and Economics

Prof. Stephen J. DeCanio
Fall 2007

Room: 1104
Time: W 6:00-9:00

This course will be devoted to the economic analysis of environmental policy, focusing on issues of global environmental protection. We will cover topics such as protection of the stratospheric ozone layer, global climate change, the equity and efficiency issues involved in policy design, and private-sector responses to environmental challenges. The role of the State in a market economy and the science and politics of global environmental protection will be part of the course.

A 5-page paper and a final examination are required. Paper topics will be assigned to members of the class; all the papers will deal with theoretical or empirical questions relevant to protection of the stratospheric ozone layer or policies to avert dangerous climate change. The paper does not have to be a long one, but real research will be necessary. The paper is due at the beginning of class in Week 8. Late papers will not be accepted.

All the readings except for the book by Richard Benedick are available online. The Benedick book can be purchased at Washington Law (1900 G Street, NW; 202-223-5543; Farragut West Metro). The online readings are available through the California Digital Library accessible from the UC Washington Center. Additional readings may be assigned or suggested from time to time throughout the quarter. Students are expected to have completed the assigned readings before they are discussed in class.

The outline and schedule for the course is as follows:

Week 1 (September 26): Economics and Environmental Protection – Introduction.

Topics: What are the underlying assumptions of economic analysis?
What is cost-benefit analysis?
Should economics drive environmental policy?

Week 2 (October 3): Protection of the Stratospheric Ozone Layer I: Science and Economics

Topics: Stratospheric ozone science
Risk analysis
Economics of ozone layer protection

Readings:

Richard Elliot Benedick, *Ozone Diplomacy: New Directions in Safeguarding the Planet*. Cambridge, MA: Harvard University Press, 1998.

Stephen J. DeCanio, "Economic Analysis, Environmental Policy, and Intergenerational Justice in the Reagan Administration: The Case of the Montreal Protocol," *International Environmental Agreements: Politics, Law and Economics*, Vol. 3, No. 4 (2003): 299-321.

Week 3 (October 10): Protection of the Stratospheric Ozone Layer II: Politics and Implementation

Topics: How was the Montreal Protocol negotiated?
 How has the Montreal Protocol evolved?
 What has been the economic experience ex post?
 Remaining problems

Week 4 (October 17): No Class or Guest Lecture TBD.

Week 5 (October 24): Current Issues in Ozone Layer Protection – Strengthening the Montreal Protocol (Guest Lecture)

Readings:

Catherine S. Norman, Stephen J. DeCanio, and Lin Fan, "Opportunities and Challenges for the 20th Anniversary of the Montreal Protocol," UCSB Department of Economics Working Paper 1-07, available at <http://www.econ.ucsb.edu/papers/wp01-07.pdf>.

Week 6 (October 31): Climate Change I: Science and Uncertainty

Topics: The global carbon cycle
 How do we know global warming is real?
 Science and uncertainty

Readings:

HM Treasury, 2006. *Stern Review on the Economics of Climate Change*, Chapter 1, "The Science of Climate Change: Scale of the Environment Challenge," available at http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/tern_review_report.cfm.

Week 7 (November 7): Climate Change II: Economics

Topics: Cost-benefit analysis or risk management?
 Would climate protection wreck the economy?
 Market and institutional reforms, tax shifting, and technological progress
 Economics and the real world
 The role of modeling in policy analysis

Readings:

Stephen J. DeCanio, *The Economics of Climate Change*. San Francisco: Redefining Progress, 1997, <http://www.rprogress.org/newpubs/1998/ecc.pdf>

Florentin Krause, Stephen J. DeCanio, J. Andrew Hoerner, and Paul Baer, "Cutting Carbon Emissions at a Profit (Part I): Opportunities for the U.S.," *Contemporary Economic Policy*, Vol. 20, No. 4 (October 2002): 339-365.

Florentin Krause, Stephen J. DeCanio, J. Andrew Hoerner, and Paul Baer, "Cutting Carbon Emissions at a Profit (Part II): Impacts on U.S. Competitiveness and Jobs," *Contemporary Economic Policy*, Vol. 21, No. 1 (January 2003): 90-105.

Porter, Michael E., and Claas van der Linde, "Toward a New Conception of the Environment-Competitiveness Relationship," *Journal of Economic Perspectives*, Vol. 9, No. 4 (Fall 1995): 97-118.

Palmer, Karen, Wallace E. Oates, and Paul Portney, "Tightening Environmental Standards: The Benefit-Cost or the No-Cost Paradigm?" *Journal of Economic Perspectives*, Vol. 9, No. 4 (Fall 1995): 119-132.

Week 8 (November 14): Climate Change III: Ethics

Topics: Denial, disinformation, and disingenuousness
 Intergenerational equity
 International equity

Readings:

HM Treasury, 2006. *Stern Review on the Economics of Climate Change*, Chapter 2, "Economics, Ethics and Climate Change," available at http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report.cfm.

5-page paper is due at the beginning of class.

Week 9 (November 21) – No Class: Thanksgiving Holiday**Week 10 (November 28): Politics, Policy, and Thinking About the Long Run**

Topics: Science and “value judgments”
Living in a material world
Utilitarianism and calculation

Readings:

Martin Weitzman, “The *Stern Review* of the Economics of Climate Change,” forthcoming in the *Journal of Economic Literature*, September 2007, available at <http://post.economics.harvard.edu/faculty/weitzman/papers/JELSternReport.pdf>.

Stephen J. DeCanio, “Is Economics the Wrong Language for Addressing Climate Policy,” paper presented at joint UC/ACEEE Workshop, Energy and Economic Policy Models: A Reexamination of Some Fundamentals, November 16-17, 2006, available at <http://www.aceee.org/conf/06modeling/ucsb.pdf>.

Week 11 (December 5): Final Examination