

ENVIRONMENTAL ECONOMICS, REGULATION AND POLICY
Syllabus and Reading List

Economics 721/Public Administration 727

Fall 2012

Professor: Glenn Blomquist

Phone: 257-3924 (voice mail)

Hours: TR 1:45-3:15pm & 5:00-6:00pm & M-F by appointment.

University of Kentucky

TR 3:30-4:45pm, BE 208

Office: BE 335Q (Economics)

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Text: Field, Barry C. and Martha K. Field. *Environmental Economics: An Introduction*. 5th. ed., (Boston: McGraw-Hill Irwin, 2009).

Course Description:

This course takes a balanced, practitioner approach to environmental regulation and policy. Central to the approach is a comprehensive framework for formulating environmental policy. Analytical techniques for estimating the effects of proposed programs are examined. Strengths and weaknesses of benefit-cost analysis (BCA) in the regulatory process are explored in the context of political economy. Current environmental policy is evaluated. A background economics course such as PA/ECO 652 is required.

Grades:

Evaluation will be based on class participation (33%), presentations (33%), and written assignments (34%). For Ph.D. students written assignments will include a paper on an environmental policy issue or other approved policy topic.

Participation: Informed class discussion central. If a class is missed, a short essay should be written on an assigned, related topic as make up; it will be due no later than one week later.

Environmental Policy Presentation: Presentations will consist of summarizing and leading discussion on readings and one regulatory (economic) analysis done by EPA. Ph.D. students will present their papers in class at the end of the course. Ideally this paper will be a research proposal.

Final Exam: The final exam period for this course is 3:30-5:30pm, Thursday, December 13, 2012. We may use this period to schedule presentations. The presentations take the place of a final examination. Ph.D. papers are due by 5:30pm, Friday, December 14, 2012.

Course Objectives:

Knowledge of key legislative and regulatory developments in US environmental policy.

Awareness of ethical basis for the role of efficiency in regulation.

Knowledge of how regulations are promulgated and the role of benefit-cost analysis.

Awareness of the methods used for estimating benefits and costs of regulations.

Ability to apply knowledge described above to issues such as climate change policy.

Readings:

Readings not in Field and Field are available electronically through the UK library or at the listed

URL.

I. PERSPECTIVE ON ENVIRONMENTAL ECONOMICS AND POLICY

Ruff, Larry E. "The Economic Common Sense of Pollution" *Public Interest* 19 (Spring 1970): 69-85.

Field and Field. *Environmental Economics*. Chapter 1 "What is Environmental Economics?"

Environmental Economics Blog < www.env-econ.net > by Tim Haab and John Whitehead is a good source for economic analysis of environmental news (and weird humor.)

Council of Economic Advisors. *Economic Report of the President*, various years, 1947-2012: <http://www.gpoaccess.gov/eop/> (Divide the years. Track the content on environmental regulation and policy.)

Everyone reads:

1982 report Chapter 6 "Reforming Regulation of Government Activity" and
2012 report Chapter 8 "Improving the Quality of Life through Smart Regulation, Innovation, Clean Energy, and Public Investment"

II. CURRENT U.S. ENVIRONMENTAL POLICY

Field and Field. *Environmental Economics*. Chapter 14 "Federal Water Pollution Control Policy"

Field and Field. *Environmental Economics*. Chapter 15 "Federal Air Pollution Control Policy"

Field and Field. *Environmental Economics*. Chapter 16 "Federal Policy on Toxic and Hazardous Substances"

Field and Field. *Environmental Economics*. Chapter 17 "State and Local Environmental Issues" (solid waste, recycling, and land use controls)

Jenkins, Robin, Elizabeth Kopits and David Simpson. "The Evolution of Solid and Hazardous Waste Regulation in the United States" *Review of Environmental Economics and Policy* 3 (Winter 2009): 104-120.

McConnell, Virginia and Margaret Walls. "U.S. Experience with Transferable Development Rights" *Review of Environmental Economics and Policy* 3 (Summer 2009): 288-303.

Field and Field. *Environmental Economics*. Chapter 20 "The Global Environment"

III. ETHICS AND ENVIRONMENTAL JUSTICE

Field and Field. *Environmental Economics*. Chapter 9.

Brandt-Rauf, Sherry I. and Paul W. Brandt-Rauf, "Occupational Health Ethics: OSHA and the Courts," *Journal of Health Politics, Policy and Law* 5 (Fall 1980), 523-534.

Kriesel, Warren, Terence J. Center and Andrew G. Keeler. "Neighborhood Exposure to Toxic Releases: Are There Racial Inequities?" *Growth and Change* 27 (Fall 1996): 479-499.

Baden, Brett M. and Don L. Coursey. "The Locality of Waste Sites Within the City of Chicago: A Demographic, Social, and Economic Analysis" *Resource and Energy Economics* 24 (February 2002): 53-94.

Jenkins-Smith, Hank C. "Professional Roles for Policy Analysts: A Critical Assessment," *Journal of Policy Analysis and Management* 2 (Fall 1982), 88-100.

IV. FRAMEWORK FOR ANALYSIS OF ENVIRONMENTAL POLICY

Field and Field. *Environmental Economics*. Chapter 3- 6.

Economic Analysis of Federal Regulations Under Executive Order 12866

http://www.whitehouse.gov/omb/inforeg_riaguide/#iii

U.S. Environmental Protection Agency. *Guidelines for Preparing Economic Analyses*. EPA 240-R-00-003 (September 2000).

<http://yosemite.epa.gov/ee/epa/eed.nsf/pages/Guidelines.html#download>

and

U.S. EPA *Guidelines for Preparing Economic Analyses: External Review Draft* (September 12, 2008). <http://yosemite.epa.gov/ee/epa/erm.nsf/vwRepNumLookup/EE-0516?OpenDocument>

Arrow, Kenneth J. et al. "Is There a Role for Benefit-Cost Analysis in Environmental, Health, and Safety Regulation?" *Science* 272 (April 12, 1996): 221-222.

Harrington, Winston. "Grading Estimates of Costs and Benefits of Federal Regulation: A Review of Reviews" Resources for the Future Discussion Paper 06-39 (September 2006).

Graham, John D. "The Evolving Regulatory Role of the U.S. Office of Management and Budget" *Review of Environmental Economics and Policy* 1 (Summer 2007): 171-191.

Hahn, Robert W. and Patrick M. Dudley. "How Well Does the U.S. Government Do Benefit-Cost Analysis?" *Review of Environmental Economics and Policy* 1 (Summer 2007): 192-211.

Resources for the Future (RFF). Conference on New Ideas for Risk Regulation held June 22-23, 2009 in Washington, DC. <http://www.rff.org/Events/Pages/New-Ideas-for-Risk-Regulation.aspx>

Center for Regulatory Effectiveness: <http://thecre.com/ombpapers/centralrev.html>

V. ESTIMATING COSTS OF POLLUTION ABATEMENT ACTIVITIES

Field and Field. *Environmental Economics*. Chapters 8.

Porter, Michael E. and Claas van der Linde. "Toward a New Conception of Environment-Competitiveness Relationship" *Journal of Economic Perspectives* 9 (Fall 1995): 97-118.

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

Greenstone, Michael. "The Impacts of Environmental Regulations on Industrial Activity: Evidence from the 1970 and 1977 Clean Air Act Amendments and the Census of Manufacturers" *Journal of Political Economy* 110 (December 2002): 1175-1219.

VI. ESTIMATING BENEFITS OF ENVIRONMENTAL IMPROVEMENTS

Field and Field. *Environmental Economics*. Chapter 7.

Blomquist, Glenn C. "Value of Life, Economics of" in the Economics Section edited by Orley Ashenfelter of the *International Encyclopedia of the Social and Behavioral Sciences* edited by Neil J. Smelser and Paul B. Baltes (New York: Pergamon of Elsevier Science, 2001) Volume 24, pages 16132-9. (Class Notes)

Blomquist, Glenn C. "Self-Protection and Averting Behavior, Values of Statistical Lives, and Benefit Cost Analysis of Environmental Policy" *Review of Economics of the Household* 2 (March 2004): 89-110.

U.S. EPA, National Center for Environmental Economics. "Frequently Asked Questions about Mortality Risk Valuation"
<http://yosemite.epa.gov/ee/epa/eed.nsf/webpages/MortalityRiskValuation.html#estimatevsl>

Viscusi, W. Kip. "The Heterogeneity of the Value of Statistical Life: Introduction and Overview" *Journal of Risk and Uncertainty* 40 (February 2010): 1-13.

Hoehn, John, Mark Berger, and Glenn Blomquist. "A Hedonic Model of Interregional Wages, Rents and Amenity Values," *Journal of Regional Science* 27 (November 1987): 605-620.

Aldy, Joseph E. and W. Kip Viscusi. "Age Differences in the Value of Statistical Life: Revealed Preference Evidence" *Review of Environmental Economics and Policy* 1 (Summer 2007): 241-260.

Krupnick, Alan. "Mortality-risk Valuation and Age: Stated Preference Evidence" *Review of Environmental Economics and Policy* 1 (Summer 2007): 261-282..

Blomquist, Glenn C. and John C. Whitehead. "Resource Quality Information and Validity of Willingness to Pay in Contingent Valuation" *Resource and Energy Economics* 20 (June 1998): 179-196.

Portney, Paul R. "The Contingent Valuation Debate: Why Economists Should Care" *Journal of Economic Perspectives* 8 (Fall 1994): 3-17.

Hanemann, W. Michael. "Valuing the Environment through Contingent Valuation" *Journal of Economic Perspectives* 8 (Fall 1994): 19-43.

Diamond, Peter A. and Jerry A. Hausman. "Contingent Valuation: Is Some Number Better than No Number?" *Journal of Economic Perspectives* 8 (Fall 1994): 45-64.

VII. ENVIRONMENTAL POLICY TOOLS

Field and Field. *Environmental Economics*. Chapters 10-13.

Goulder, Lawrence H. and Ian W.H. Parry. "Instrument Choice in Environmental Policy" *Review of Environmental Economics and Policy* 2 (Summer 2008): 152-174.

VIII. OIL SPILLS

Review Field and Field Chapter 16.

Carson, Richard T., Robert C. Mitchell, Michael Hanemann, Raymond J. Kopp, Stanley Presser, and Paul A. Ruud. "Contingent Valuation and Lost Passive Use: Damages from the Exxon Valdez Oil Spill" *Environmental and Resource Economics* 25 (2003): 257-286.

Boyd, James W. "Lost Ecosystem Goods and Services as a Measure of Marine Oil Pollution Damages" RFF Discussion Paper 10-31 (May 2010).

Brennan, Timothy. "Who Bears the Long-Term Costs of Stricter Anti-Spill Policy? It's Not Who You Think" RFF Feature (August 2010).

RFF Research and the 2010 Gulf Coast Oil Spill
<http://www.rff.org/News/Features/Pages/2010-Gulf-Coast-Oil-Spill.aspx>

IX. CLIMATE CHANGE

Review Field and Field Chapter 20.

Solow, Robert M. "An Amateur among Professionals" *Annual Review of Resource Economics* 1 (2009): 1-14.

Hartwick, John M. "What Would Solow Say?" *Journal of Natural Resources Policy Research* 1 (January 2009): 91-96.

Randall, Alan. 'Reflections on Solow's 1974 Richard T. Ely Address', *Journal of Natural Resources Policy Research* 1 (January 2009): 97 — 101.

Stavins, Robert N. "What Can We Learn from the Grand Policy Experiment? Lessons from SO₂ Allowance Trading" *Journal of Economic Perspectives* 12 (Summer 1998): 69-88.

Symposium on "The Economics of Climate Change: The Stern Review and Its Critics" *Review of Environmental Economics and Policy* 2 (Winter 2008): 45-113.

- (1) Mendelsohn
- (2) Sterner & Persson
- (3) Weyant
- (4) Dietz & Stern

Weitzman, Martin L. "GHG Targets as Insurance against Catastrophic Climate Change Damages" NBER Working Paper 16136 (June 2010).

Cooke, Roger M. and G.N. Kelly. "Lessons Learned from the Joint EUUSNRC Project on Uncertainty Analysis of Probabilistic Accident Consequence Codes" RFF Discussion Paper DP 10-29 (May 2010).

Frass, Arthur. "The Treatment of Uncertainty in EPA's Analysis of Air Pollution Rules: A Status Report" RFF Discussion Paper 10-04 (February 2010).

Cameron, Trudy Ann. "Updating Subjective Risks in the Presence of Conflicting Information: An Application to Climate Change" *Journal of Risk and Uncertainty* 30 (January 2005): 63-97.

Sutter, Daniel and Marc Poitras. "Do People Respond to Low Probability Risks? Evidence from Tornado Risk and Manufactured Homes" *Journal of Risk and Uncertainty* 40 (April 2010): 181-196.

Carlsson, Fredrik, Katarina Mitesh, Alan J. Krupnick, Elina Lampi, Åsa Lofgren, Ping Qin, Susie Chung, and Thomas Sterner. "Paying for Mitigation: A Multiple Country Study" RFF Discussion Paper EfD 10-12 (May 2010).

Tol, Richard S.J. "The Economic Effects of Climate Change" *Journal of Economic Perspectives* 23 (Spring 2009): 29-51.

Barrett, Scott. "The Coming Global Climate-Technology Revolution" *Journal of Economic Perspectives* 23 (Spring 2009): 53-75.

Levitt, Steven on the Daily Show with Jon Stewart on global warming, October 27, 2009
<http://www.thedailyshow.com/watch/tue-october-27-2009/steven-levitt>

<http://www.thedailyshow.com/watch/tue-august-7-2007/jason-jones-180---nantucket>

Blonz, Joshua, Dallas Burtraw and Margaret A. Walls. "Climate Policy's Uncertain Outcomes for Households: The Role of Complex Allocation Schemes in Cap-and-Trade" RFF Discussion Paper 10-12 (March 2010).

Hahn, Robert W. and Robert N. Stavins. "The Effect of Allowance Allocations on Cap-and-Trade System Performance" RFF Discussion Paper 10-21 (March 2010).

Metcalf, Gilbert E. "Market-based Policy Options to Control U.S. Greenhouse Gas Emissions" *Journal of Economic Perspectives* 23 (Spring 2009): 5-27.

Schmalensee, Richard and Robert Stavins "The Power of Cap-and-Trade" *The Boston Globe* (July 27, 2010) email

Hanemann, Michael. "California's New Greenhouse Gas Laws" *Review of Environmental Economics and Policy* 2 (Winter 2008): 113-129.

Bushnell, James, Carla Peterman, and Catherine Wolfram. "Local Solutions to Global Problems: Climate Change Policies and Regulatory Jurisdiction" *Review of Environmental Economics and Policy* 2 (Summer 2008): 175-193.

Ogawa, Hikaru, and David E. Wildasin. "Think Locally, Act Locally: Spillovers, Spillbacks, and Efficient Decentralized Policymaking." *American Economic Review* 99 (September 2009): 1206-17.

U.S. EPA. *Climate Change - Climate Economics, Economic Analysis at EPA*
<http://www.epa.gov/climatechange/economics/economicanalyses.html>

Leiserowitz, A., E. Maibach, C. Roser-Renouf, and J.D. Hmielowski. *Climate Change in the American Mind: Public Support for Climate and Energy Policies in March 2012*. (Yale University and George Mason University, New Haven, CT: Yale Project on Climate Change, 2011) Communication. <http://environment.yale.edu/climate/files/Policy-Support-March-2012.pdf>

Aldy, Joseph E., Alan J. Krupnick, Richard G. Newell, Ian W. H. Parry, and William A. Pizer. "Designing Climate Mitigation Policy" *Journal of Economic Literature* 48 (2010): 903-934.