

Environmental Economics

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Office Hours: Wednesday / Thursday 2:30 - 3:30 and most other times by appointment

Suggested Text:

Callan, S. J. and Thomas, J. M. (2000, or later) *Environmental Economics and Management*. 2nd Ed. (or later) New York: Dryden Press.

Optional Texts:

Lomborg, B. *The Skeptical Environmentalist*. New York: Cambridge University Press.

Field, B. C. and Field, M. K. (2009) *Environmental Economics, An Introduction*. New York: McGraw Hill.

Grades:

1 Midterm Exam	30%
1 Comprehensive Second Midterm	40%
1 Final Paper (4-6 pages, due exam period)	30%
Marginal extra credit for class participation	(up to 5% bonus)

Overview: Environmental economics studies man's relationship with nature using rational choice models of human behavior. This course analyzes how self-interested behavior can generate environmental problems, and also how those same interests may call forth efforts to solve environmental problems through public policies. Environmental problems are not new, but have become significant public policy issues as people established stable communities and farms. New problems emerged through increases in population density, industrialization, and scientific advance. The course provides students with the tools to think systematically about environmental problems and policies. Specific environmental problems such as air pollution, acid rain and global warming are analyzed in detail towards the end of the course.

TENTATIVE COURSE OUTLINE

<u>Dates</u>	<u>Topics</u>	<u>Readings</u>
8/21	Introduction: Economic Development and the Environmental Some History and Background: Environmental Economics is not really new: Production, Health, and Regulation in early times. Positive analysis: scarcity, economics and the environment: a review of basic economic geometry. Normative analysis: the Pareto principles, Cost/Benefit Analysis: Pareto efficient pollution, Rational Choice as Net-Benefit Maximizing Behavior	C&T 1,2,7 / L 1,3,4
9/4	Commons and Externalities Problems The Tragedy of the Commons: advantages and problems of private and collective management. Externalities: third party effects of private action. Graphical and game theory representations of, why externalities can be problems.	C&T 3, 4

- 9/18 **Environmental Regulation as a Solution** C&T 3, 4
 Solutions: privatization, trade and the Coase theorem, internalizing externalities with Pigovian taxes, regulation with penalties, effluent markets
- 9/30 **Time and Uncertainty** C&T 3, 4 / L1
 Present Discounted Values, Expected Values, and Cost Benefit Analysis
 Tools for comparing alternative futures in an uncertain world. Present discounted values, expected values, environmental web data sources
- 10/2 **Review for Exam** Study Guide I
10/4 Exam
 10/9 **Review of Exam**
- 10/11 **Politics and Environmental Regulation** C&T 6 / L2
 The median voter model: voting, regulation, and the environment
 Informational problems: environmental illusion? The environmental and political information problems, and the impact of bureaucracy and special interest groups
- 10/23 **Applications: Local Public Environmental Problems** C&T 16, 18 / L 13, 20
 On the history of environmental regulation: health and sanitation regulation
 Land usage and privatization, privatization and the enclosure movement, disposal of waste materials, Conservation and wildlife management: hunting, fishing, and logging
- 10/25 **Applications: Regional Environmental Problems** C&T 11, 14, 19 / L 23, 22
 On the history of environmental regulations: national environmental policies, emergence of the conservation and green movements
 Conservation: national parks, forests, and the Audibon society, National air and water pollution standards
- 11/1 **Applications: Global Environmental Problems** C&T 13 / L 24
 The history of international environmental problems and treaties, Global warming: CO2 concentrations and global temperatures--remember the ice ages, What is the Kyoto treaty? Do treaties work?
- 11/27 **Review for Second Exam** Study Guide II
11/29 Second Exam
 12/4 **Review of Second Exam**
- 12/6 **Conclusions, discussion, and course overview / (Workshop for final papers)**
- 12/14 Final Paper Due at roger.congleton@mail.wvu.ed (11:59 p.m.--Via E-mail)**

If you are a student with a disability and you need academic accommodations, please see me and contact the disability Resource Center.