

BOSTON COLLEGE
Department of Economics

Economics 278

Spring 1998

Environmental Economics

Professor Frank Gollop

Carney 244

Office Hours: Tuesday/Thursday 3:00-4:30

Text: Callan, Scott J. and Janet M. Thomas. Environmental Economics and Management.
Boston: Irwin, 1996.

Course Requirements:	Midterm	35%
	Economic Analyses (3)	15%
	Final	50%

Due Dates for Economic Analyses: Feb 26, Mar 24, and Apr 16

Course Outline

THEORY

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|------|---|--------------|
| I. | Introduction | Jan 13 |
| II. | Terminology of Environmental Analysis | Jan 15 |
| III. | Microeconomic Theory: Traditional Market Analysis | Jan 20-22 |
| IV. | Microeconomic Theory: Market Failure/Public Goods/Externalities | Jan 27-Feb 3 |
| V. | Traditional Solutions | Feb 5 |
| VI. | Economic Solutions | Feb 10-12 |

MIDTERM

Feb 17

POLICY

- | | | |
|-------|--|--------|
| VII. | Risk Analysis | Feb 19 |
| VIII. | Benefit-Cost Analysis | |
| | A. Measuring Benefits | Feb 24 |
| | B. Measuring Costs | Feb 26 |
| | C. Decision-Making Using Benefit-Cost Analysis | Mar 10 |

APPLICATIONS

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|-----|--|--------------|
| IX. | Air Pollution | |
| | A. Evolution of U.S. Policy | Mar 12 |
| | B. Mobile Sources: Case Study of Autos | Mar 17 |
| | C. Stationary Sources | Mar 19 |
| | D. Case Study of Electric Utilities | Mar 24 |
| | E. Global Warming: Greenhouse Gases | Mar 26 |
| X. | Hazardous Waste | Mar 31-Apr 2 |
| XI. | Municipal Solid Waste | Apr 7-14 |

OPEN DISCUSSION

- | | | |
|------|--------------------------------|-----------|
| XII. | Topics to be Selected by Class | Apr 16-28 |
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Course Requirement: Three Economic Analyses

Three 150-word essays are due over the course of the semester. You are to find some current event concerning some environmental issue reported in a newspaper or periodical and then submit a copy of the article together with a brief (no more than 150 words) analysis of some economic aspect stimulated by something stated in the article.

The due dates are Feb 26, Mar 24, and Apr 16.

No extensions will be granted. No essays will be accepted late. They are due at the beginning of class on the due date. Each essay is worth five (5) points toward the final grade.

**Economics 278
Syllabus**

THEORY

- I. Introduction
- II. Terminology of Environmental Analysis
Chapter 1
Salinas-Leon, Roberto, "Green Herrings: NAFTA and the Environment,"
Regulation, (Winter 1993), pp. 29-34.
- III. Microeconomic Theory: Traditional Market Analysis
Chapter 2
- IV. Microeconomic Theory: Market Failure/Public Goods/Externalities
Chapter 3
- V. Traditional Solutions
Chapter 4
Kellogg, Michael, "After Environmentalism," Regulation, Number 1 (1994),
pp. 25-34.
- VI. Economic Solutions
Chapter 5

POLICY

- VII. Risk Analysis
Chapter 6 (read for context); Chapter 7
- VIII. Benefit-Cost Analysis
 - A. Measuring Benefits
Chapter 8 (pp. 220-51)
Brennan, Timothy J., "Discounting the Future: Economics and Ethics,"
Resources, No. 120 (Summer 1995), pp. 3-6.
 - B. Measuring Costs
Chapter 8 (pp. 251-65)
Braconi, Frank, "Environmental Regulation and Housing Affordability,"
Cityscape, 2 (September 1996), Excerpts distributed in class.
Portney, Paul R. and Winston Harrington, "Health-Based Environmental
Standards: Balancing Costs with Benefits," Resources, No. 120 (Summer
1995), pp. 7-10.
 - C. Decision-Making Using Benefit-Cost Analysis
Chapter 9
Viscusi, W. Kip, "Secondhand Smoke," Regulation, 3, (1995), pp. 42-49.

APPLICATIONS

- IX. Air Pollution
 - A. Evolution of U.S. Policy
Chapter 10
 - B. Mobile Sources: Case Study of Autos
Chapter 11 (pp. 333-54)
 - C. Stationary Sources
Chapter 11 (pp. 354-57; pp. 359-76)
 - D. Case Study of Electric Utilities
 - Maloney, M.T. and Bruce Yandle, "Cleaner Air at Lower Cost: Bubbles and Efficiency," Regulation (May/June 1980), pp. 49-52.
 - Noll, Roger, "Implementing Marketable Emissions Permits," American Economic Review (May 1982), pp. 120-24.
 - Gollop, Frank and Mark Roberts, "Cost-Minimizing Regulation of Sulfur Emissions: Regional Gains in Electric Power," Review of Economics and Statistics (February 1985), Introduction and sections III and IV; section II optional.
 - E. Global Warming: Greenhouse Gases
Chapter 12 (pp. 390-415)
 - Gollop, Frank, Kelly Chaston, and Kathleen Lang, "The Battle Against Major Air Pollutants: Some Wartime Statistics," Working Paper (September 1996).
- X. Hazardous Waste
Chapter 16
- XI. Municipal Solid Waste
Chapter 17