BOSTON COLLEGE
Department of Economics

Economics 278 **Spring 2002**

Environmental Economics

Professor Frank Gollop
McGuinn 519
Office Hours: Tuesday/Thursday 3:00-4:30

Text: Callan, Scott J. and Janet M. Thomas. Environmental Economics and Management. (Second Edition) Fort Worth, TX: Dryden, 2000.

Course Requirements:		
	First Midterm	20%
	Second Midterm	25%
	Economic Analyses (3)	15%
	Final	40%

Three Economic Analyses

Three 150-word essays are due over the course of the semester. Find an article in a newspaper or periodical (dated after January 1, 2002) discussing a current environmental issue. Write a brief analysis (no more than 150 words) of some economic concept or principle stimulated by something stated in the article. I am looking for economic analysis, not a book report describing the content of the article. With your formal training in undergraduate economics, I want you to take the article one-step beyond what the author wrote for a general audience. Submit your analysis with the article attached.

The due dates are February 21, March 21, and April 9.

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 a maximum of five (5) points toward the final grade.

COURSE CALENDAR

THEORY

I.	Introduction	Jan 15
II.	Terminology of Environmental Analysis	Jan 17
III.	Microeconomic Theory: Traditional Market Analysis	Jan 22-24
IV.	Microeconomic Theory: Market Failure/Public Goods/Externalities	Jan 29 - Feb 5
	FIRST MIDTERM (45 minutes)	Feb 7
V.	Traditional Solutions	Feb 7-12
VI.	Economic Solutions	Feb 12-19

POLICY

VII.	Risk Analysis	Feb 21
VIII.	Benefit-Cost Analysis	
	A.Measuring Benefits	Feb 26
	B.Measuring Costs	Feb 28
	C.Decision-Making Using Benefit-Cost Analysis	Mar 12
	SECOND MIDTERM (75 minutes)	Mar 14

APPLICATIONS

IX.	Air Pollution	
	A.Evolution of U.S. Policy	Mar 19
	B.Mobile Sources: Case Study of Autos	Mar 21
	C.Stationary Sources	Mar 26
	D.Case Study of Electric Utilities	Apr 2
	E.Global Warming: Greenhouse Gases	Apr 4
X.	Hazardous Waste	Apr 9-11
XI.	Municipal Solid Waste	Apr 16-18

OPEN DISCUSSION

XII.	Topics Selected by Class	Apr 23-30

SYLLABUS

THEORY

I. Introduction

II. Terminology of Environmental Analysis
Chapter 1

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
Gray, George M., "Measure Risk, Not Just Emissions," Regulation, 22, No. 4, (1999), pp. 12-15.

VIII. Benefit-Cost Analysis
A. Measuring Benefits
Chapter 8
Brennan, Timothy J., "Discounting the Future: Economics and Ethics," Resources, No. 120 (Summer 1995), pp. 3-6.
B. Measuring Costs
Chapter 9
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 10
Viscusi, W. Kip, "Secondhand Smoke," Regulation, 3, (1995), pp. 42-49.

APPLICATIONS

IX. Air Pollution
- A. Evolution of U.S. Policy
  Chapter 11
- B. Mobile Sources: Case Study of Autos
  Chapter 12 (pp. 322-41)
- C. Stationary Sources
  Chapter 12 (pp. 342-69)
- 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.
  Schmalensee, Richard, Paul Joskow, A. Denny Ellerman, Juan Pablo Montero, and Elizabeth M. Bailey, "An Interim Evaluation of Sulfur Dioxide Emission Trading," Journal of Economic Perspectives, 12 (Summer 1998), pp. 53-68.
  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 13 (pp. 382-405)
  Sedjo, Roger A., "Harvesting the Benefits of Carbon 'Sinks'," Resources, 133 (Fall 1998), pp. 10-13.
  Taylor, Jerry, "Clouds over Kyoto," Regulation (Winter 1998), pp. 57-62.
  Gollop, Frank, Kelly Chaston, and Kathleen Lang, "The Battle Against Major Air Pollutants: Some Wartime Statistics," Working Paper (September 1996).

X. Hazardous Waste
  Chapter 17

XI. Municipal Solid Waste
  Chapter 18