I. Catalog Description

EC 438 Seminar in Waste Management Economics (4)

Intensive study of solid, hazardous and nuclear waste, statute law. Economic ramification of control and non-control on quality of life, income, employment, and growth; study of the tradeoffs involved with economic choices of control. 4 seminars. Prerequisites: EC 201 or EC 202.

II. Required Background

EC 201 or EC 202.

III. Expected Outcomes

The EC 438 student will:

a) define and describe the problems in waste management,

b) review the historical to current background of U.S. waste policies,

c) apply basic economic theory to the problems of waste management,

d) identify and analyze solutions to and the implications of various solutions to these problems, and

e) compare and contrast U.S. and international case studies pertinent to waste management practices, policies, and technologies.

IV. Text and Readings

Texts:

Readings:


Postel, S.  *Defusing the Toxic Threat* (New York: Worldwatch Institute, 1987).


References:

American Economics Review
American City & County
American Journal of Agricultural Economics
Appraisal Journal
Bio Science
Ecology Law Quarterly
Econonica
Economic Development and Cultural Change
Environmental Law
Environmental Management
Government Finance Review
Growth and Change
International Journal of Environmental Studies
Journal of Environmental Economics and Management
Journal of Law and Economics
Journal of Political Economy
Journal of Urban Economics
Land Economics
National Affairs
Natural Resources Journal
Newsfront
Oxford Economic Papers
Quarterly Journal of Economics
Risk Management
Science
The Amicus Journal
UCLA Journal of Environmental Law
Virginia Journal of Natural Resources
Waste Age
V. **Minimum Student Materials**

Notebooks and access to reference materials.

VI. **Minimum College Facilities**

Classroom with audio-visual facilities.

VII. **Course Outline**

A. **Solid Waste and Its Control**
   1. Environmental Impact
   2. Economic Implications of Various Control and Non-Control Solutions
   3. Impact of Solutions on Employment, Income, and Growth
   4. International Sources

B. **Hazardous Waste**
   1. Environmental Impact
   2. Economic Implications of Various Controls and Non-Control Solutions
   3. Impact of Solutions on Employment, Income, and Growth
   4. International Sources

C. **Nuclear Waste**
   1. Environmental Impact
   2. Economic Implications of Various Control and Non-Control Solutions
   3. Impact of Solutions on Employment, Income, and Growth

D. **U.S. as An International Polluter**
   1. Solid Waste
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2. Nuclear Waste

VIII. Instructional Methods

Instructor-led discussions covering basic microeconomic tools necessary for the study of waste management. Student participation in discussions focusing on specific articles assigned by the instructor concerning waste management topics. Student term papers will be presented for discussion by the seminar during the last two weeks of the quarter.

IX. Evaluation of Outcomes

There are three required writing assignments. Students will:

a) write a term paper of no more than 15 pages examining the specifics of a waste problem that includes a discussion of the economics of the source of the problem, economic policies the to cure the problem, changes in overall economic welfare, and progress towards optimality, and present the results to the class,

b) submit a short 3-6 page book report on a popular effort book concerning waste management that focuses on normative versus positive analysis, and

c) write an essay exam that will be cumulative.