

Course Outline

Economics School of Business & Economics ECON 3710 - **3.00** - Academic

Environmental Economics

Rationale

Update Curricunet to reflect standard course outlines established by the School.

Calendar Description

Students apply the tools of microeconomic analysis to environmental issues. Topics include property rights and efficient resource use, market failure, the over-utilization of common pool resources, the Coase Theorem, non-market valuation techniques, government policies designed to cost-effectively control pollution, and real-world strategies for controlling pollution.

Credits/Hours

Course Has Variable Hours: No Credits: 3.00 Lecture Hours: 3.00 Seminar Hours: 0 Lab Hours: 0 Other Hours: 0 *Clarify:* Total Hours: 3.00 Delivery Methods: (Face to Face) Impact on Courses/Programs/Departments: No change Repeat Types: A - Once for credit (default) Grading Methods: (S - Academic, Career Tech, UPrep)

Educational Objectives/Outcomes

- 1. Compare the concepts of efficiency and sustainability.
- 2. Demonstrate that ownership externalities typically result in an inefficient use of resources.
- 3. Explain what a cost-effective pollution control strategy entails.
- 4. Determine whether a taxation scheme can be utilized to achieve a socially efficient level of pollution control.
- 5. Demonstrate that a marketable pollution permit scheme will control pollution in a cost-effective manner.

- 6. Describe the real-world strategies that have been utilized to control air and water pollution.
- 7. Review how the Kyoto Protocol was supposed to deal with global warming.

Prerequisites

ECON 1900-Principles of Microeconomics

Co-Requisites

Recommended Requisites

Exclusion Requisites

Texts/Materials

Textbooks

1. **Required** T. Tietenberg and L. Lewis. *Environmental and Natural Resource Economics*, 8th ed. Addison-Wesley, 2009

Student Evaluation

The Course grade is based on the following course evaluations.

Participation 0-20% (0.00%) Assignments/quizzes 0-20% (0.00%) Project/term paper 0-25% (0.00%) Midterm(s) 30-60% (0.00%) Final exam 30-50% (0.00%)

Course Topics

- 1. Environmental Impact Assessment in Canada
 - Establishment and evolution of land preservation policy in B.C. and Canada
- 2. Concepts Used to Value the Environment
 - Static efficiency
 - Dynamic efficiency
- 3. Property Rights and Externalities
 - Efficiency and the characteristics of the structure of property rights
 - Ownership externalities
 - The problem with open-access
 - Public goods and inefficiency
 - Coase Theorem
- 4. Basic Tools of Analysis
 - Total economic value
 - Contingent valuation
 - Hedonic pricing
 - Travel-cost method
 - Valuation of life

- 5. Economics of Pollution Control
 - Requirement for a cost-effective pollution control strategy
 - Emissions standards
 - Pigovian taxes
 - Marketable pollution permits
- 6. Air Pollution
 - Air pollution control strategies in Canada and the U.S.
 - Kyoto Protocol
- 7. Water Pollution
 - Water pollution control strategies in Canada and the U.S.
- 8. Sustainability

Methods for Prior Learning Assessment and Recognition

As per TRU Policy

Last Action Taken

Implement by Submission Preview Subcommittee Chair Peggy McKimmon

Current Date: 27-Oct-20