

NEW COURSE PROPOSAL

PROGRAM: BUSINESS AND ECONOMICS

1. Catalog Description of the Course. *[Include the course prefix, number, full title, and units. Provide a course narrative including prerequisites and corequisites. If any of the following apply, include in the description: Repeatability (May be repeated to a maximum of ___ units); time distribution (Lecture ___ hours, laboratory ___ hours); non-traditional grading system (Graded CR/NC, ABC/NC). Follow accepted catalog format.]*

ECON 362. Environmental Economics (formerly Introduction to Environmental Economics) (3)

Three hours of lecture per week.

Prerequisite: ECON 110 and 111, or ECON 300.

Economic analysis of environmental problems and policy. Market failures due to externalities, public goods, and common property resources are examined. Private (market) and public (governmental) solutions to environmental problems are examined.

2. Mode of Instruction.

| | Units | Hours per Unit | Benchmark Enrollment |
|------------|----------|-------------------|-------------------------|
| Lecture | <u>3</u> | <u>1</u> | <u>25</u> |
| Seminar | | | |
| Laboratory | | | |
| Activity | | | |

3. Justification and Learning Objectives for the Course. (Indicate whether required or elective, and whether it meets University Writing, and/or Language requirements) *[Use as much space as necessary]*

This course develops selected tools of economic analysis and applies them to environmental issues. It is an intermediate level applied microeconomics course. It is a required course for the major in Environmental Science and Resource Management, and is an elective course for the Economics minor.

Students who successfully complete this course will be able to:

- Define the conditions for an economically efficient allocation of resources.
- Demonstrate those circumstances under which a market based economy will allocate resources efficiently.
- Demonstrate those circumstances under which a market based economy will fail to allocate resources efficiently. In particular, students will be able to demonstrate market failures due to externalities.
- Analyze government regulatory attempts to correct market failures in terms of their economic efficiency.
- Describe incentive based approaches to correct market failures.
- Apply the Coase theorem to environmental issues, and use the Coase theorem to develop policies to improve environmental quality.
- Define common property resources.
- Identify examples of common property resources.
- Analyze government policy toward common property resources.

4. Is this a General Education Course **NO**

5. Course Content in Outline Form. *[Be as brief as possible, but use as much space as necessary]*

Welfare Economics

- Economic efficiency
- Perfect competition and economic efficiency
- Market failures due to externalities

An Economic Model of Environmental Quality

- Why do consumers and businesses pollute?
- The relationship between emissions and environmental quality
- The benefits and costs of improving environmental quality

The Regulatory Approach to Pollution Control

- Advantages and disadvantages to a command and control approach to improving environmental quality

Economic Incentive Based Pollution Control

- Advantages and disadvantages of the use of effluent fees to improve environmental quality
- Advantages and disadvantages of the use of subsidies to improve environmental quality
- Advantages and disadvantages of market based approaches to improve environmental quality

Common Property Resources

- Coase's Theorem
- The Tragedy of the Commons
- Applications - Fishery management

Other Topics

- Population Dynamics and the Environment
- Economic Development and the Environment

6. References. [Provide 3 - 5 references on which this course is based and/or support it.]

- John Gowdy and Sabine O'Hara, *Economic Theory for Environmentalists*, St. Lucie Press, 1995.
Paul B. Downing, *Environmental Economics and Policy*, Little Brown, 1984.
Maureen L. Cropper and Wallace E. Oates, "Environmental Economics: A Survey," *Journal of Economics Literature*, 1992.
R. N. Stavins, *Economics of the Environment*, 4th edition, W.W. Norton, 2000.
Thomas H. Tientenberg, *Environmental and Natural Resource Economics*, 6th edition, Addison- Wesley, 2002.

7. List Faculty Qualified to Teach This Course.

Professor Dennis Muraoka

8. Frequency.

- a. Projected semesters to be offered: Fall x Spring Summer

9. New Resources Required.

None.

10. Consultation.

Attach consultation sheet from all program areas, Library, and others (if necessary)

11. If this new course will alter any degree, credential, certificate, or minor in your program, attach a program modification.

Proposer of Course

Date

