Economics and Politics of the Environment

Renato Molina

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E-mail: renato.molina@rsmas.miami.edu Office Hours: Wed 10:00am - 11:50am Office: CIMAS 213 / RSMAS Web: renatomolinah.com/teaching Class Hours: Mon/Wed 1:30pm - 2:45pm Class Room: MSC 343

UM Bulletin Description

The objective of the class is to discuss the main economic and political concepts associated with environmental policy in the US and elsewhere. In particular, the class focuses on how economic thinking, methods, and data relate to conservation, environmental, and natural resource policy and management problems. The class will draw on marine, terrestrial, climate, weather, and other inter-dependent domains to illustrate similarities and differences from an economic and political perspective. Students interested in enrolling in this class should have a basic background in economics.

Course Description

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The class is intended for advanced undergraduate, as well as graduate students interested in environmental and natural resource issues and how to frame them using economic insights. Students should have taken an undergraduate microeconomics course (ECO211 "Principles of Microeconomics" or similar) prior to enrolling. An advanced economic background, however, is not necessary, as the class is intended as an inclusive discussion using economic concepts, which will be introduced in class. Multiple backgrounds are thus welcome to take the class as they will benefit from this diversity and can contribute to it as well.

Course Objectives

- 1. To familiarize students with major conservation, environmental, and natural resource issues and current policy debates.
- 2. To illustrate how economic insights relate to these problems and how they can shed light on these issues.

To encourage students to think critically, acknowledging pros and cons of economic concepts, in public policy debates on conservation, environmental, and natural resource issues.
Readings

Required

Goodstein, Eban S and Stephen Polasky (2020). Economics and the Environment. John Wiley & Sons.

Optional

Charles, Kolstad and others (2000). *Environmental Economics*. 2nd. Oxford University Press, Oxford, UK.

Berck, Peter and Gloria E Helfand (2011). *The economics of the environment*. Pearson Addison-Wesley.

Boardman, Anthony E, David H Greenberg, Aidan R Vining, and David L Weimer (2017). *Costbenefit analysis: concepts and practice*. Cambridge University Press.

Course Policies

Grading Policy

- Class participation (10%)
- 4 Assignments (5% each)
- 2 Policy briefs (**20**% each)
- Final presentation (30%)

The class will mix material from the required reading, peer-reviewed publications, and press articles that cover topics related to conservation, environmental, and natural resource management. Throughout lectures, the class will discuss a press article or a student's question that is relevant for the topic of the lecture. Students are expected to come to class prepared to engage in discussion of the material.

The class participation grade depends on the quality of individual contributions to class discussion. Students should ask good and thoughtful questions, but should also be able to supply insightful comments throughout the semester. Students will receive a single grade for class participation based the contributions over the entire semester.

Four assignments will be posted throughout the semester. All of the assignments are in the form of a critical group reading covering a specific conservation, environmental, or natural resource policy or management issue and the use of economic and political concepts to discuss policy choices for addressing the issue. The deliverable, excluding references, will be in the form of a 800-1000 word report. Students are expected to produce high quality, polished, and professional work. Late work will not be graded, unless an exception has been granted prior to the due date.

Students will also write two Policy Briefs during the semester. Each Policy Brief will focus on a specific conservation, environmental, or natural resource policy or management issue of the student's choice. The first Policy Brief will be centered around the identification of an issue, the incentives behind it, and the challenges associated with the problem. The second Policy Brief will focus on potential solutions to the previously identified problem based on the best available

science. Each Policy Brief will be in the form of a report of 1500-2000 words, excluding references. As a cohesive project, the students will summarize their Policy Briefs and present to the class for feedback and dissemination at the end of the semester.

Attendance Policy

Students are expected to abide by the University of Miami's attendance policy. Other absence reasons should be discussed with me in advance.

E-mail Policy

I am usually quick to respond to e-mails. Sometimes, however, I may get busy or on the road and fail to write back in time. If you do not receive a response after one or two days, please feel free to reach out again.

Honor Policy

All students are expected to abide by the University of Miami's honor code. Anyone caught cheating on exams, improperly referencing published written or electronic material, or submitting work that is not their own will fail the course.

Technology During Lectures Policy

The use of technology for any other purpose that is not taking notes or working on the class content is highly discouraged. Repeated violations to this policy will result in final grade penalization.

Lecture Schedule

Students must read the assigned chapters or papers before lecture. Important: Class content and readings are subject to change, contingent on mitigating circumstances and the progress of the class. Any changes will be announced via Blackboard.

Week 01, 08/22 - 08/26: Introduction and Ethics of Environmental Policy

Goodstein & Polasky Ch. 1-2

- Pollution
- Government regulation
- Global issues
- Utility and utilitarianism
- Social welfare

Week 02, 08/29 - 09/02: Externalities and the Efficiency Standard

Goodstein & Polasky Ch. 3-4

- Open access
- Public goods
- Optimality
- Coasean bargaining

Week 03, 09/05 - 09/09: Measuring the Benefits and Costs of Environmental Protection

Goodstein & Polasky Ch. 5-6

- Consumer surplus
- Market and non-market valuation
- Cost accounting
- Impacts of regulation
- Cost-benefit analysis

Assignment 1 due at the end of the week

Week 04, 09/12 - 09/16: The Safety and the Sustainability Standards

Goodstein & Polasky Ch. 7-8

- Environmental justice
- Regressive regulation
- Approaches to sustainability
- Private and social discounting
- Climate change
- Ecological economics

Week 05, 09/19 - 09/23: Measuring Sustainability

Goodstein & Polasky Ch. 9

- Limits to growth
- Impacts and footprints
- Weak sustainability

- Natural capital
- Allocations across generations

Week 06, 09/26 - 09/30: Natural Resources and Ecosystem Services

Goodstein & Polasky Ch. 10

- Nonrenewable resources
- Renewable resources
- Ecosystem services and natural capital

Assignment 2 due at the end of the week

Week 07, 10/03 - 10/07: Consumption, Welfare, and Behavior

Goodstein & Polasky Ch. 11

- Money and happiness
- Social norms and consumption
- Behavioral economics

Policy Brief 1 due at the end of the week

Week 08, 10/10 - 10/14: Political Economy of Environmental Regulation

Goodstein & Polasky Ch. 12

- Regulation process
- Bureaucracy and political influence
- Bipartisanship and environmental regulation

Week 09, 10/17 - 10/21: Environmental Regulation in the US

Goodstein & Polasky Ch. 13-14

- Clean air
- Freshwater, marine, and coastal management
- Hazardous waste
- Chemical and pesticides
- Endangered Species

Assignment 3 due at the end of the week

Week 10, 10/24 - 10/28: Incentive-Based Regulation

Goodstein & Polasky Ch. 15-16

- Regulation and technological progress
- Permits and taxes
- Prices vs quantities
- Successes and failures from incentive-based regulation

Week 11, 10/31 - 11/04: Clean Technology and the Future of Environmental Policy

Goodstein & Polasky Ch. 17-18

- Path dependence
- Promoting clean technology
- Technology and policy options for electricity, heat, and transportation

Week 12, 11/07 - 11/11: Environmental Policy and Economic Development

Goodstein & Polasky Ch. 19-20

- Poverty and the environment
- Population growth
- Political economy of sustainable development
- Technological transfer
- Resource conservation
- Trade and the environment

Assignment 4 due at the end of the week

Week 13, 11/14 - 11/18: Global Environmental Agreements

Goodstein & Polasky Ch. 21

- Agreements as a public good
- Monitoring and enforcement
- Ozone depletion
- Biodiversity
- Global warming

Policy Brief 2 due at the end of the week

Week 14, 11/21 - 11/25: Thanksgiving recess

Week 15, 11/28 - 12/02: Final Presentations II

Week 16, 12/05 - 12/09: Final Presentations II