

# EC313 Environmental and Resource Economics

Seminar Leader: Israel Waichman  
Course Times: Tue 14:00-15:30, Thu 14:00-15:30  
Email: i.waichman@berlin.bard.edu

## Course Description

The course centers on the economic analysis of environmental issues. We will start by addressing market failures related to the environment and to the management of natural resources. Throughout the course we will discuss both global and local environmental issues (e.g., global and local resources held in common, energy production, climate change, water pollution, overfishing, etc.). Our goal will be to review and critique the policy instruments provided by economics and management science to overcome market failures. We also confront the practical issues affecting the application of these instruments, including the question of how monetary values can be assigned to environmental goods.

## Learning Outcomes

- Understand nature of environmental and natural resource problems.
- Learn how to apply economic principles for solving environmental problems.
- Learn specific topics in environmental and resource economics

## Requirements

### Prerequisites

This is an applied microeconomics course. Students taking this class should have already successfully completed the "Microeconomics for Economics" class.

### Textbook

For this course, we will use the following textbook:

**"Environmental and Natural Resource Economics" (10th edition) by Tom Tietenberg and Lynne Lewis, Global Edition, Pearson, 2015**

Other reading sources will be distributed during the course.

### Attendance

Attendance at ALL classes is expected. More than two absences (that is absences from two sessions of 90 minutes) in a semester will significantly affect the grade for the course.

### Assessment

Assessment will be based on attendance, preparation for classes, regular and active participation, professionalism (see below), exercises (which may be presenting an issue in the class) as well as a midterm (60 minutes) and final examination (90 minutes).

### Policy on Late Submission of Exercises

Exercises that are up to 24 hours late will be downgraded one full grade (from B+ to C+, for example). After that, we will accept late submissions only until the end of the week in which they were due (Sun, 23:59), but these cannot receive a grade of higher than C. Thereafter, the student will receive a failing grade for the assignment.

## Grade Breakdown

Seminar participation, professionalism and exercises 40%

Midterm examination 30%

Final examination 30%

## Schedule

Classes start on Tuesday, January 29 and run until Thursday, May 9, with spring break planned for April 15-21. Completion week is from May 13-17. Attendance is mandatory during completion week and the final will be scheduled during this week.

The schedule provided is provisional in order to allow for flexibility. IN fact, I plan to have at least one or two guest lecturers for the course. It is the students' responsibility to keep themselves informed of any changes to the schedule provided here. An up-to-date schedule will be maintained by the course management on the internet in Google classroom. The password to join Google classroom will be handed out in class.

We start with basic issues of applying economics methods to the questions of sustainability and environmental protection. Then we proceed with particular topics of the environment.

Week 1 – Introduction

Jan 29, Jan 31

Reading: Tietenberg and Lewis, Ch. 1

Week 2 – The economic approach property rights, externalities, and environmental problems

Feb 05, Feb 07

Reading: Tietenberg and Lewis, Ch. 2

Week 3 – The economic approach property rights, externalities, and environmental problems

Feb 12, Feb 14

Reading: Tietenberg and Lewis, Ch. 2

Week 4 – Evaluating trade-offs: Benefit Costs Analysis and Other Decision-Making Metrics

Feb 19, Feb 21

Reading: Tietenberg and Lewis, Ch. 3

Week 5 –Valuing the Environment: Methods

Feb 26, Feb 28

Reading: Tietenberg and Lewis, Ch. 4

Week 6 –Valuing the Environment: Methods

Mar 05, Mar 07

Reading: Tietenberg and Lewis, Ch. 4

Week 7 – Valuing the Environment: Methods, Review **and the midterm exam.**

Mar 12, **Mar 24**

Reading: Tietenberg and Lewis, Ch. 4

Week 8 – Common Pool Resources: Commonly Valuable Fisheries

Mar 19, Mar 21

Reading: Tietenberg and Lewis, Ch. 12

Week 9 – Energy

Mar 26, Mar 28

Reading: Tietenberg and Lewis, Ch. 7

Week 10 – Economics of Pollution Control: An Overview

Apr 2, Mar 4

Reading: Tietenberg and Lewis, Ch. 14

Week 11 – Stationary-Source Local and Regional Pollution

Apr 9, Mar 11

Reading: Tietenberg and Lewis, Ch. 15

Spring break

Apr 15-Apr 19

Week 12 – Climate Change

Apr 23, Apr 25

Reading: Tietenberg and Lewis, Ch. 16

Week 13 – Climate Change

Apr 30, May 2

Reading: Tietenberg and Lewis, Ch. 16

Week 14- Possibly another topics (t.b.a), Review

Mai 7, May 9

Reading: t.b.a

Week 15 – Completion Week (date and time of the final exam: t.b.a.)

*Classes missed due to federal holidays will not be rescheduled.*

## Exercise Deadlines

Exercises are due before class one week after being given. Those exercises will be given throughout the course where appropriate and constitute an integral part of the final grade.

## Professionalism

Being a student is your full-time job and with it come a set of responsibilities and expectations, as with any other job. Maintaining a professional attitude towards your course of study is something that also prepares you for later work life. A professional attitude towards your studies is shown by coming to class on time, being prepared, being courteous to your teachers and fellow students. It is exhibited by writing your essays with care, actively participating in class, avoiding distractions (excessive bathroom breaks, using smartphones to check on irrelevant issues during class etc.), not missing classes except for the most dire of circumstances and in general by adapting to the rules of the course without trying to bargain for personal exceptions.

## **Ethics/Academic honesty**

A core value of the academy is truth and the pursuit thereof. Nothing can shake the foundations of this pursuit as much as academic dishonesty as it undermines the trust that is indispensable to it. This is why I will not excuse any instance of academic dishonesty. Plagiarism, cheating during exams, copying homework assignments (or doing individual assignments with a classmate) all constitute violations of academic honesty and of the clause on “academic integrity” that each student has signed in the student handbook. They can lead to failing the course and will be reflected in the student’s record (having a record of academic dishonesty can make obtaining scholarships, achieving a study abroad place or admission to another program difficult if not outright impossible).

(version: 06.01.2019)