

ECON 2713 (WI01) - Economics of the Natural Environment

Department of Economics

Acadia University

Winter 2025

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| Instructor | Dr. Justin Beaudoin |
| Email | justin.beaudoin@acadiau.ca |
| Office Location | BAC 346 & Virtual (Microsoft Teams) |
| Office Hours | Mon, 9:30 - 10:30; Wed, 11:30 - 12:30; and by appointment |
| Course Website | https://moodle.acadiau.ca/course/view.php?id=34262 |
| Class Location | BAC 141 |
| Class Times | Mon/Wed/Fri, 10:30 - 11:20am |

Course Description

This course serves as an introductory analysis of pollution and the overuse of natural resources. Concepts from microeconomics are used to compare observed pollution and resource use with the socially optimal outcome to understand the causes of market failure. These tools allow for the evaluation of various government policies to address existing problems related to the environment and the changing climate.

Course Learning Objectives

Upon course completion students are expected to be able to:

- critically evaluate statements and policies related to the environment;
- understand the tradeoffs faced in environmental policy;
- convey economic arguments to a general audience;
- apply their knowledge in a wide range of professional capacities; and
- serve as better informed global citizens.

Prerequisite

In general, completion of ECON 1013 with a grade of C- or better (or approval of the instructor). Students without a background in supply and demand analysis may find parts of the course more challenging, but I will review the required microeconomic concepts as necessary.

Course Materials and Websites

Moodle is the primary source for class announcements and will contain all course materials: syllabus, class notes/slides, video recordings, and materials for assignments and exams.

Microsoft Teams may be utilized for office hours and review sessions.

Class Format

It is anticipated that the course will be conducted “in person” throughout the semester, and students are expected to be able to attend classes and exams in person.

Classes will *not* be recorded, though I will save and post my written notes from class, to the extent possible. These notes will not be a perfect substitute for seeing the material in person.

Technology Issues & Support

If you are having technological issues, please contact the Service Desk for support. The Consultants will help you work through any issues that you’re having. There are several contact methods:

Live Chat: ts-chat.acadiiau.ca

HUB Service Portal: hub.acadiiau.ca or ts.acadiiau.ca

Phone: 902-585-4357 or 1-888-609-3330

Email: helpdesk@acadiiau.ca

How to Ask Questions?

I encourage you to ask questions throughout the course. I can promise you that if you have a question, several of your classmates have that same question. There are many ways to ask questions relating to material discussed in class:

- In person during class
- Via Teams using the chat feature
- During office hours
- Via email

Office Hours

I will hold office hours on Mondays from 9:30 - 10:30 and Wednesdays from 11:30 - 12:30. I am also happy to arrange appointments for other times to meet; you are welcome to send

me an email to schedule a time. Office hours may be held in my office or over Teams.

Should any issues or concerns arise throughout the course, you are encouraged to consult with me as soon as possible so that we can work together to find the resources to help you succeed.

Textbook

The textbook for the course, *which is highly recommended but not required*, is:

“Environmental Economics: An Introduction, 8th Edition,” by Barry Field and Martha Field, McGraw-Hill. ISBN: 9781260575491.

A link to purchase the book from the campus bookstore is available on Moodle. Our course will follow the organization of the 8th edition of the textbook fairly closely according to the scheduled outlined below, though previous editions of the textbook may be similar and could be used for the course.

Assignments

We will have two assignments throughout the course:

- Assignment #1: due Feb 10
- Assignment #2: due Mar 31

Specific instructions will be provided as the course proceeds.

Article Discussion

Throughout the course, news articles will be used to facilitate discussion of current events and the introduction and application of course concepts. These articles will be posted a few days before they are discussed and several questions will be included with each article. Students will be evaluated on their contribution and participation in these discussions; this participation can occur verbally in class or through the optional submission of written answers prior to the class discussion. The focus is not on having the “correct” answers, but rather on effort and critical thinking. Accordingly, students should not use generative AI tools (such as ChatGPT) to submit their responses.

Students’ grades for this activity will be posted on Moodle on a rolling basis and will be adjusted as the course proceeds. It is expected that there will be 8 articles discussed throughout the semester.

Midterm Test

There will be one midterm test in the course. The test will be held on Wed, Feb 12. More details regarding the format and focus of the test will be provided closer to the test date.

No make-up test will be provided; the weight of a missed test will be reassigned to the weight of the final exam in determining your overall grade for the course.

Final Exam

The Final Exam will be scheduled by the Registrar. Unless there is a valid reason (*approved in advance*), students are required to take the exam on the date assigned by the University. The Final Exam will cover the entire course. Practice exam(s) and a study guide will be provided in advance. More details regarding the format and timing of the exam will be provided closer to the exam date.

Grading

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|--------------------|-----|
| Assignment #1 | 10% |
| Assignment #2 | 15% |
| Article Discussion | 15% |
| Midterm Test | 25% |
| Final Exam | 35% |

No extra credit opportunities will be offered. The grade scale for the course is below:

| Letter Grade | GPA | % Range | Rating |
|--------------|------|-----------|-----------|
| A+ | 4.33 | 90 - 100% | Excellent |
| A | 4.0 | 85 - 89% | |
| A- | 3.67 | 80 - 84% | |
| B+ | 3.33 | 77 - 79% | Good |
| B | 3.0 | 73 - 76% | |
| B- | 2.67 | 70 - 72% | |
| C+ | 2.33 | 67 - 69% | Average |
| C | 2.0 | 63 - 66% | |
| C- | 1.67 | 60 - 62% | |
| D+ | 1.33 | 57 - 59% | Pass |
| D | 1.0 | 53 - 56% | |
| D- | 0.67 | 50 - 52% | |
| F | 0.0 | 0 - 49% | Failure |

Class Material

The following list outlines the material that we will cover in the course, with the class discussions highlighting the most important concepts within each chapter. The extent to which

we cover various topics will be affected in part by student interest, amount of discussion, and difficulty of material.

- Chapter 1: What is Environmental Economics?
- Chapter 2: The Economy and the Environment
- Chapter 3: Benefits and Costs, Supply and Demand
- Chapter 4: Markets, Externalities, and Public Goods
- Chapter 5: The Economics of Environmental Quality
- Chapter 6: Frameworks of Analysis
- Chapter 7: Benefit-Cost Analysis: Benefits
- Chapter 8: Benefit-Cost Analysis: Costs
- Chapter 9: Criteria for Evaluating Environmental Policies
- Chapter 10: Decentralized Policies: Liability Laws, Property Rights, Voluntary Action
- Chapter 11: Command-and-Control Strategies: The Case of Standards
- Chapter 12: Incentive-Based Strategies: Environmental Charges and Subsidies
- Chapter 13: Incentive-Based Strategies: Market Trading Systems
- Chapter 18: Global Climate Change
- Chapter 19: International Environmental Agreements

The class notes and links to recorded videos will also be posted on Moodle.

Class Schedule

The following is a preliminary schedule for the course topics that may be updated as the course proceeds. Readings refer to the textbook and are listed as suggestions to keep you up-to-date with the course; the materials in that day's class may not perfectly coincide with the listed reading. The posted class notes will contain any information about any potential changes to the schedule in advance.

| Class # | Date | Notes |
|---------------------------|-------------|---|
| <i>Week 1</i> | | |
| 1 | Mon, Jan 6 | Class Introduction & Discussion of Syllabus |
| 2 | Wed, Jan 8 | Chapter 1; Chapter 2 |
| 3 | Fri, Jan 10 | Chapter 2 |

| Class # | Date | Notes |
|--|-------------|------------------------------|
| <i>Week 2</i> | | |
| 4 | Mon, Jan 13 | Chapter 2; Chapter 3 |
| 5 | Wed, Jan 15 | Chapter 3; Article 1 |
| 6 | Fri, Jan 17 | Chapter 3; Chapter 4 |
| <i>Week 3</i> | | |
| 7 | Mon, Jan 20 | Chapter 4 |
| 8 | Wed, Jan 22 | Chapter 4; Article 2 |
| 9 | Fri, Jan 24 | Chapter 4; Chapter 5 |
| <i>Week 4</i> | | |
| 10 | Mon, Jan 27 | Chapter 5 |
| 11 | Wed, Jan 29 | Chapter 5; Article 3 |
| 12 | Fri, Jan 31 | Chapter 6 |
| <i>Week 5</i> | | |
| 13 | Mon, Feb 3 | Chapter 6 |
| 14 | Wed, Feb 5 | Chapter 6 |
| 15 | Fri, Feb 7 | Chapter 7; Article 4 |
| <i>Week 6</i> | | |
| 16 | Mon, Feb 10 | Chapter 7; Assignment #1 due |
| 17 | Wed, Feb 12 | Midterm |
| 18 | Fri, Feb 14 | Chapter 7 |
| <i>Week 7: Study Break</i> | | |
| - | Mon, Feb 17 | No class |
| - | Wed, Feb 19 | No class |
| - | Fri, Feb 21 | No class |
| <i>Week 8</i> | | |
| 19 | Mon, Feb 24 | Chapter 8 |
| 20 | Wed, Feb 26 | Chapter 8; Chapter 9 |
| 21 | Fri, Feb 28 | Chapter 9 |
| <i>Week 9</i> | | |
| 22 | Mon, Mar 3 | Chapter 9 |
| 23 | Wed, Mar 5 | Chapter 10; Article 5 |
| 24 | Fri, Mar 7 | Chapter 10 |

| Class # | Date | Notes |
|---|-------------|---------------------------------------|
| Week 10 | | |
| 25 | Mon, Mar 10 | Chapter 11 |
| 26 | Wed, Mar 12 | Chapter 11; Article 6 |
| 27 | Fri, Mar 14 | Chapter 11 |
| Week 11 | | |
| 28 | Mon, Mar 17 | Chapter 12 |
| 29 | Wed, Mar 19 | Chapter 12; Article 7 |
| 30 | Fri, Mar 21 | Chapter 12 |
| Week 12 | | |
| 31 | Mon, Mar 24 | Chapter 13 |
| 32 | Wed, Mar 26 | Chapter 13; Article 8 |
| 33 | Fri, Mar 28 | Chapter 13; Chapter 18 |
| Week 13 | | |
| 34 | Mon, Mar 31 | Chapter 18; Assignment #2 due |
| 35 | Wed, Apr 2 | Chapter 18 |
| 36 | Fri, Apr 4 | Chapter 19; Course Wrap Up and Review |
| Final Exam: Date and location TBA | | |

Course Policies

Course dates/policies are outlined at the beginning of the course and are the student's responsibility; please communicate any issues, concerns or scheduling conflicts *well before* the relevant deadline so that we can address the issue appropriately.

Please communicate with me if an illness or other issue will cause you to miss multiple classes. I ask that students exercise proper classroom etiquette in respect of their classmates and the instructor.

Accessibility

Acadia University is dedicated to improving access to campus life for all students with disabilities. While we attempt to ensure that all courses are accessible, we recognize that there are barriers that need to be addressed on an individual basis. Students who require accommodations to complete coursework or otherwise fully participate in class should contact Accessible Learning Services directly as soon as possible.

For more information, please email accessible.learning@acadiau.ca

Academic Ethics

It is the responsibility of students to familiarize themselves with the University's policy on academic ethics. Copying, plagiarism and other academic offenses will not be tolerated. Penalties are severe and may result in suspension from a program/course and expulsion. A complete list of Academic Regulations can be found on the Policies page of the University's website. I strongly recommend that all class members review the sections in the 2024-25 academic calendar dealing with Academic Policy and Regulations. It is a serious offense to engage in academic misconduct.

Last updated: January 2, 2025