ECON 332 - Intro to Environmental Economics (Cross-listed with MBA 645)

O'Malley School of Business Manhattan University Fall 2024

Instructor: Dr. Jimena González **Time:** MR 3:00 – 4:15 pm

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Office: DLS 422

1 Course Description

An introductory study of the way economists approach environmental problems. Topics covered include externalities, market failure, public goods, common-pool resources, policy instruments (e.g. taxes, command and control policies, cap and trade, and tradable pollution permits), and cost-benefit analysis. (**Prerequisites**: Econ 203 and Math 154)

2 Learning Goals and Objectives

By the end of this course, students will be able to

- 1. gain an understanding of the way economists approach environmental and natural resource problems.
- 2. be knowledgeable about environmental economics theory and policies, and students will understand the advantages and disadvantages of various environmental policies.
- 3. learn to apply economic analysis to assess environmental problems.
- 4. describe the main market failures that relate to the environment
- 5. explain the difference between private and public goods and how they relate to environmental issues
- 6. solve algebraically and graphically for the market and socially efficient outcomes in the presence of an externality
- 7. identify and explain command-and-control and market-based solutions to environmental problems
- 8. derive the welfare cost of using inefficient environmental policies
- 9. describe the advantages and disadvantages of various environmental policies
- 10. derive the efficiency loss associated with a carbon tax and cap and trade program if costs are different than anticipated
- 11. describe the advantages and disadvantages of different methods to measure demand for environmental quality
- 12. express a position clearly and argue both sides of a controversial issue

3 Office Hours

My office hours are **in-person** in my office (DLS 413) on **Mondays and Thursdays** from **10:30 - 11:30 am**. You have two options to set an appointment. To schedule an office hours appointment, please follow the instructions below. After the appointment is set up, you will find the appointment in your Google Calendar. Hence, I expect every student to use Google Calendar (See Google Calendar Video Tutorial).

- Option 1 (try this first): Go to Dr. González' Google Calendar Appointments that have 20-minute office hours time slots. If you decide to stop by my office hours at the last minute (i.e. 5 minutes before they start or while they are happening, check the same link to verify that there is an opening.
- Option 2: If the appointment slots don't work, please send me a calendar invitation. Follow these instructions. Through this method, you have to wait until I accept the calendar invitation. Depending on my schedule, these appointments may be virtual.

4 Course Materials

Required:

- 1. Slack (See Technology Section)
- 2. Calculator Policy: The calculator permitted for closed book tests and exams in the O'Malley School of Business is the Texas Instrument BA II Plus or simpler (Engineering students: you may use the non-graphing calculator permitted at your school). Phones, tablets, and smartwatches are never permissible for calculators during an exam. They must be turned off and put away for the duration of the exam.
- 3. Textbook clarification: while I follow Callan and Thomas (Callan, S. and J. Thomas. 2013. Environmental Economics and Management: Theory, Policy, and Applications. Sixth edition. South-Western Cengage Learning), I do not require students to purchase the textbook. Nonetheless, I placed the textbook on reserve at the library.
- 4. Assigned journal articles, news articles, podcast episodes, and videos.

Recommended:

I strongly encourage you to read about current events and try to connect and apply the course material to them. Important sources of articles include:

- The New York Times (As an MU student, you can subscribe for free)
- Environmental Economics Blog: https://www.env-econ.net/
- NPR Planet Money Podcast
- NPR The Indicator from Planet Money Podcast
- Freakonomics Podcast

5 Technology

- **Moodle**: Students are responsible for checking Moodle since information about assignments, readings, and class information in general is posted there.
- MU Email: Every student must have a Manhattan email account. Course announcements will occasionally be sent to your Manhattan email. Therefore, students must check their email accounts regularly.
- Slack: Students need to join a Slack group through an email invitation.

• Slack App:

- Students need to use Slack, which is a communication tool used in the business world. Below are the links to download the free app to your computers and/or phones. See video tutorial. Links to download Slack App:
 - * Windows
 - * Mac
 - * Andriod
 - * iPhone
- The main purpose of the app is to communicate. You will be able to post messages for the entire class or send messages to individual students or me. I also send announcements and reminders in Slack.
- Hence, getting notifications from the app is very important (you are responsible for checking the app \rightarrow **turn on the notifications**).
- You will receive an invitation to join Slack. Please join Slack before the first day of classes.
- Electronic Device with Wireless Capabilities: For most classes, students should bring a device with wireless capabilities (e.g., ideally: a laptop or tablet, but phone works). Students who can't bring such a device should speak to me, via email or Slack, after the first class.
- ITS Personal PC & Technology Recommendations: These can be found on the ITS website, here.
- Google Drive File Stream: Download Google Drive to your laptop as this will allow you to back up any files (not only Google Suite files) to your computer. See instructions.
- Microsoft Office: as an MU student, you may install Microsoft Office (Word, Excel, etc) on up to 5 personal devices. See instructions. Students must use Microsoft Word (instead of Google Docs) for the Literature Review.

6 Course Structure

- 1. **Lectures and Handouts** To complement the lecture, I use in-class handouts for students to practice before graded in-class activities (item 2). Students must take advantage of these practice activities as they are meant to prepare students for subsequent graded activities.
- 2. In-Class Activities (ICAs): Students are given in-class activities that include analytical problems and open-ended questions. These ICAs are meant for students to apply and master course materials. These ICAs are only given during class and must be completed as a team during class time. There are no makeup in-class activities. Failure to attend class, without a valid excuse (see #8), will result in zero points for the assignment.
- 3. Reading and Podcast Quizzes: For each discussion, students are expected to listen to a podcast or watch a video before class. Besides these, I will assign podcast episodes, videos, and articles periodically. Before these assignments, students will answer a couple of questions to assess whether they read or listened to the assignment. There are no make-up quizzes. (See item #8).
- 4. Application Exercises (AEs) and Games/Experiments: From time to time, there are application exercises (AEs) and games/experiments that are graded based on participation. Some of these activities are based on podcasts. Students get credit if they come prepared for class. There are no makeup in-class activities. Failure to attend class, without a valid excuse (see #8), will result in zero points for the assignment.
- 5. **Discussion Topic**: Each student will be asked to cover a podcast or video, approved by Dr. González, related to environmental economics and to lead a 10-minute discussion at the end of a class period based on the article (MBA students will lead a 15-minute discussion). The score of the discussion topic also depends on your attendance and participation during other discussions. Failure to attend a discussion without a valid excuse will result in a **2-percentage point reduction** in your discussion grade. A student who is not paying attention or who is disrespectful during a classmate's discussion will be penalized with a **1-percentage point reduction** for the discussion grade.
- 6. **Position Papers**: Each student will write two position papers this semester, each about 2 pages long (or 4 pages long for MBA students). In each paper, each student will argue both sides of a controversial environmental issue. More details will be given in class.
- 7. Exams: There are two midterm exams. The first midterm exam is on Monday, September 30th and the second midterm exam is on Monday, November 18th. Each exam is closed-book and closed-notes, and it is timed. Texas Instrument BA II Plus calculators are allowed (Note: calculators with wireless capabilities and mobile phones are NOT allowed). For me to assign accurate grades, all students in the class must take the same examination at the same time. Absence from an exam will result in a grade of zero for that exam, except in highly unusual circumstances (travel arrangements are not considered valid excuses for not taking an exam). If you miss an exam and believe unusual circumstances apply in your case, you must explain your excuse in writing and provide convincing documentation, as soon as possible after the time of the exam. In other words, except for emergencies, all students must take the exams at the scheduled times. Unless there are extenuating and unavoidable circumstances, there is no makeup for exams. The burden of proof for these circumstances is on the student.
- 8. Attendance Policy and Expectations: By university policy, I will keep careful attendance records and file a report to the Dean's office when a student has four unexcused absences. Extended absences (unexcused) should be reported to your Academic Advisor who will inform all of your professors. According to Manhattan University's attendance policy, all students are expected to attend all classes. More important than simply attending, however, is being present for the active process of learning that occurs in class. You should expect and be prepared to be called on and to participate in discussions and activities.

9. Valid Excuses: If a medical emergency, serious illness, or family emergency causes you to miss class, you must inform me of the emergency before class with an explanation. You shouldn't include any medical or family details. For exams, you will need to provide documentation. For example, you may ask a doctor or nurse to write a note excusing you (without details about the medical condition). To facilitate the communication, use this Google Form which keeps records of absences and failure to submit assignments due to valid excuses. Students must submit this form on the date of the absence or of the failure to submit the assignment (unless the absence prevents the student from doing so). Late forms are not accepted unless there is a valid reason. The form also allows students to submit documentation. documentation.

7 Grading

Grade Breakdown:

Activity	Weight
In-class Activities (ICAs)	20%
AEs and Experiments/Games	5%
Reading and Podcast/Video quizzes	15%
Discussion Topic	8%
Position Paper 1	10%
Position Paper 2	10%
Exam 1	16%
Exam 2	16%

Grade Guideline:

Range	Grade
93.00% - 100.00%	A
90.00% - 92.99%	A-
87.00% - 89.99%	B+
83.00% - 86.99%	В
80.00% - 82.99%	В-
77.00% - 79.99%	C+
73.00% - 76.99%	С
70.00% - 72.99%	C-
67.00% - 69.99%	D+
60.00% - 66.99%	D
< 60.00%	F

I reserve the right to curve.

If you disagree with any grading of any homework, exam, or activity, you (if individual activity) or your team (if team activity) must submit an appeal. To appeal, you or your team must submit to me the following information **in-writing via email**: which question(s) you are appealing and why. If you can make a logical, well-reasoned, well-written argument for your case, you or your team will be granted the points upon appeal. **Appeals must be made within 1 week after the graded assignment has been returned to you**.

8 Course Outline

This is a tentative schedule for the course and might change during the course. I will inform you about any changes in the outline for the course or the schedule

1. Module 1: Introduction to Environmental Economics and Basics

- 1.1. Introduction to Environmental Economics
- 1.2. Why Environmental Economics?

2. Module 2: Review of Market Theory and Market Failure

- 2.1. Modeling the Market Process
- 2.2. Modeling Market Failure

3. Module 3: Environmental Policies

3.1. Command and Control Approaches

Exam 1 on Monday, September 30th

3.2. The Market Approach

4. Module 4: Environmental Policies towards Greenhouse Gas Emissions

4.1. Carbon tax vs. Cap-and-Trade

5. Module 5: Analytical Tools for Environmental Planning

5.1. Environmental Risk Analysis

Exam 2 on Monday, November 18th

6. Module 6: Cost-Benefit Analysis & Environmental Justice

- 6.1. Cost-Benefit Analysis
- 6.2. Environmental Justice

Besides these chapters, some Podcasts and videos are assigned from time to time. Instructions on how to access each podcast will be listed on Moodle. Also, detailed reading and podcast assignments will be listed on Moodle for each class meeting.

Other Important Dates:

- August 30th: Late Registration & Add/Drop ends
- **September 2** nd : Labor Day No classes
- October 14^{th} : Fall Break No classes
- October 15th (Tuesday): Monday schedule
- October 15^{th} : Midterm grades are due
- November 15th: Last day to withdraw
- November 27^{th} 29^{th} : Thanksgiving Break No Classes

9 Class Policies

To provide an excellent learning environment to everyone, some basic rules must be followed:

- 1. Students are expected to attend and participate during class. Students must come to class on time and leave the classroom after the class is over. Students arriving late or leaving early disrupt other students affecting the flow of the class. Please be considerate of your peers. If you must leave early for a valid reason, please speak to me before class. If you arrive late, please quietly enter the classroom.
- 2. During class, students are expected to be present and not to leave the classroom unless it is absolutely necessary (e.g., bathroom or family emergency). Leaving and entering the classroom is very disruptive and should be avoided.
- 3. Students are expected to come prepared to class.
- 4. Students are encouraged to ask questions during class.
- 5. I understand the advantages of using technology as a learning tool. However, technology can also be misused during class. Inappropriate usage of technology (such as web-surfing, texting, emailing, getting calls, checking Snapchat, TikTok, IG, X (Twitter), etc, or any unauthorized activities) through laptops, smartwatches, tablets, cell phones, or any other mobile devices during class will not be tolerated. A student who violates this policy will be penalized with a 1% grade point reduction for each violation.
- 6. AI Chats: I encourage students to use ChatGPT and other AI chats as a learning device. It is particularly helpful to summarize articles, simplify concepts, and brainstorm new ideas. I prohibit the use of ChatGPT or other AI chats as a cheating device specifically, you are not allowed to pass off ChatGPT or other AI chats output as your own work.
- 7. Students who miss a class are responsible for all the material covered during the class and are responsible for making the necessary arrangements to submit assignments.
- 8. Students should not engage in conversations or any distracting activities during the lecture.
- 9. Students are expected to listen and respect different viewpoints. There is zero tolerance for disrespectful behavior.

10 How to succeed in this course

- Read, listen, or watch the assignments before class
- Attend every class
- Be prepared and have tried to understand concepts before class
- Be willing to contribute to discussions and class
- Be positive, constructive, and respectful of others' opinions
- Do not be overbearing or domineering
- Be willing to be honest and admit when you don't understand a problem
- Be committed to your success
- Work on the assignments carefully
- If you are having trouble, please ask for help. Talk to me after class, send me an email, or come to my office hours. I really want you to learn and master the material!

11 Academic Integrity

As a Manhattan University student, you are part of a community of scholars and learners guided by the basic values of civility, safety, and the discourse of ideas. Students are to be committed to the principles of honesty, trustworthiness, fairness, and respect for the human dignity of all persons. Students must abide by the Manhattan College Honor Code and uphold the highest standards of academic integrity. Cheating, plagiarism, fabrication, academic misconduct, and attempting or assisting with an academic integrity violation will not be tolerated. As the course instructor, if I become aware of a potential academic integrity violation, I will follow the rules and procedures outlined in the policy on Academic Integrity. It is your responsibility to be familiar with the College's policy on Academic Integrity.

12 Copyright of Course Materials and Resources

All course materials developed by the faculty for this course and not otherwise copyrighted, such as the textbook, case studies, and published articles, are proprietary to the faculty. Any dissemination or sharing of these materials on websites, social media accounts, via email, in private chats, etc., is not allowed without explicit permission of the faculty. Such posts can be considered a violation of Academic Integrity and will be dealt with accordingly. Related to that, any use of materials you may find, posted online or otherwise made available to you by previous students will be considered plagiarism, which is also a violation of Academic Integrity.

13 Student Academic Support Services — Center for Academic Success

The Center for Academic Success (CAS) is committed to providing student-centered and student-led programs and initiatives designed to enhance learning and promote success and persistence for all Manhattan University students. Students work collaboratively with qualified peers and professionals to develop knowledge, skills, and strategies needed to thrive in the classroom and beyond.

The CAS has three locations: the Learning Commons in Thomas Hall 3.11, the Leo Learning Center in Leo 117/118, and Lee Learning Commons 6th Floor. Services include online and in-person tutoring and writing center appointments, Supplemental Instruction, STEM and reading/writing professional Learning Specialist support, and English language support. All services are free of charge and available to all Manhattan University students. Appointments are preferred but walk-ins are welcome when available. To make an appointment, students can log into their Jasper Connect account or visit the CAS in Thomas Hall, 3.10. Students can also contact success@manhattan.edu with any questions.

14 Disabilities

Under the Americans with Disabilities Act and Section 504 of the Vocational Rehabilitation Act of 1973, all students, with or without disabilities, are entitled to equal access to the programs and activities of Manhattan College. If you believe that you have a disabling condition that may interfere with your ability to participate in the activities, coursework, or assessment of the object of this course, you may be entitled to accommodations. Please schedule and appointment to speak with someone at the Specialized Resource Center in Miguel Hall, Room 300.

***Potential Changes: All details provided in this syllabus are subject to change at my discretion. All changes will be announced in class. If you have missed a lecture, please email me for any announcements.