MBAC 626: Environmental Economics and Policy
Summer 2025 – Part I

Dr. **Jimena González**

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(Note: Email me directly)

Office Hours:
My office hours will be by appointment only.

- Send me a calendar invitation following these instructions: https://manhattan.teamdynamix.com/TDClient/1932/Portal/KB/ArticleDet?ID=25369 (Make sure you wait until I accept the calendar invitation. If I don't accept the invitation, the office hours are not scheduled).
- My office hours will be via Zoom (I will provide a link within the Calendar invitation).

1. Course Description:

An introductory study of the way economists model environmental problems. The course starts with an overview of externalities, public goods, and common-pool resources, encompassing situations in which the market fails to maximize total welfare for society. The course explores the economics of environmental quality, focusing on marginal damages and marginal abatement costs of pollutants. Subsequently, it covers cost-benefit analysis, an important framework used by environmental economists to assess environmental policies. To estimate benefits, different valuation methods, including revealed and stated preferences, will be examined. The course concludes by studying various environmental policy instruments used to internalize environmental externalities, including standards, emission charges, Pigouvian taxes, subsidies, and cap-and-trade. (**Prerequisites:** MBAF 530 and MBAF 510 or equivalent undergraduate courses)

2. Learning Goals and Objectives

1. Students will understand and will model market failures connected to public goods, common-pool resources, and the presence of environmental externalities.
2. Students will identify the market outcome and the efficient outcome when the market fails.
3. Students will understand the economics of environmental quality, with particular attention to marginal damages and marginal abatement costs.
4. Students will understand the way benefit-cost analysis is used to assess environmental programs.
5. Students will comprehend the importance of valuing the benefits of the environment.
6. Students will be knowledgeable about both revealed and stated preference methods used to estimate the benefits of the environment.
7. Students will understand the economics of environmental policies and will be knowledgeable about the advantages and disadvantages of decentralized, command-and-control, and incentive-based policies.
8. Students will understand the economics of international environmental agreements and learn about examples of agreements.

3. Course Materials:

Required Textbook:

- *Environmental Economics: An Introduction* by Field and Field 8th edition. McGraw-Hill.
- **Other:**
    - Every week, I will assign a journal article, a news article, a podcast episode, or a video. Links to the assignments are posted on the course website.

Recommended:

- I strongly encourage students to read about current events related to environmental issues and try to connect and apply the course material to them. Important sources include the *Wall Street Journal, New York Times, The Washington Post, etc.*
- I also encourage students to follow the well-known environmental economics blog: *http://www.env-econ.net/*.

Technology:

- The course is accessed via Moodle
- Electronic mail: To access your MC email address, go to http://gmail.manhattan.edu/. Course announcements will occasionally be sent to your Manhattan email. Therefore, students must check their email accounts regularly.

4. Course Structure:

Every week is structured similarly, and students should expect these assignments:

1. **Reading Quiz:** Each week starts with a reading quiz with 10 multiple-choice questions. This quiz is meant to test reading comprehension. Students have 45 minutes to complete the quiz. While the quiz is open, students will not receive immediate feedback. Once the quiz closes, students can check their score and feedback. These quizzes are completed individually. While students can use their notes and textbook, they cannot work with others or use any other external tools (including AI Chats) or help.

2. **Video Assignment**
   In addition to the textbook, additional readings, podcast episodes, or videos are assigned every week. Based on the latter or the textbook reading, students are asked to complete a video assignment every week. Detailed instructions and rubrics are provided for each assignment. Students are also asked to respond to a classmate's post or video. Consequently, it is extremely important that every student completes these assignments on time.

3. **Polls:**
   Following an assignment, students will occasionally be asked to participate in a poll. These polls are graded based on participation, not on the chosen response.

4. **Dr. Gonzalez' Videos**
   For most weeks, I provide at least one video in which I go over material from the textbook or solve a problem from the end of the chapter. These videos are meant to further explain the material and to prepare students for the weekly exams.

5. **Exams:** At the end of each week, students will take a multiple-choice exam. The number of questions varies per week, but it ranges between 15 and 23. Students have 120 minutes to complete the exam. While the exam is open, students will not receive immediate feedback. Once the exam closes, students can see their scores and feedback. While students can use their notes and textbook, they cannot work with others or use any other external tools (including AI Chats), or help.

6. **Final Written Assignment:** At the end of the last week, students are asked to write a paper. Detailed instructions and a rubric are provided during week 7.

7. **Valid Excuses:** Due to the nature of this course, keeping up with the material and submitting assignments on time is fundamental. Therefore, late assignments **should be avoided**. If a medical emergency, a serious illness, or a family emergency prevents a student from submitting an assignment on time, the student must inform me promptly of the emergency via email with an explanation. I may ask for written documentation, particularly for exams.

5. Grading

Grade Breakdown:

Assignment	Weight
Quizzes	14%
Exams	35%
Video Assignments	28%
Comments on video	7%
Polls	1%
Final Written Assignment	15%
Total	100%

Grade Guideline:

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

Note: I reserve the right to curve.

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

6. Course Outline: *

Notes: F&F stands for Field & Field; All times referred to Eastern Time.

For each week, it is very important that you follow the order of the assignments.

Week 0: Review of Market Theory and Welfare Analysis

- I provide a video reviewing market theory and welfare analysis that were covered in MBAF 530. I expect every student to know the material reviewed in week 0. The video is based on F&F Chapter 3 (pages 40-58)

Week 1: Market Failure: Externalities, Common-Pool Resources, and Public Goods

(Learning Objectives 1 and 2)

- Read:
  - F&F Chapter 2 - Sections: Basic Terminology; Emissions, Ambient Quality, and Damages; and Types of Pollutants (pages 22-23; 31-37)
  - F&F Chapter 4 - All (pages 60-76)
- Reading Quiz
  - Due on Wednesday by 11:59pm. (Quizzes are typically due on Tuesday night. Due to the first week of classes, I extend the deadline by one day)
- Watch:
  - Tragedy of the Commons by Emma Refvem: http://ed.ted.com/on/hqLi4DFd (1:52)
- Poll:
  - Due Thursday by 11:59pm.
- Read:
  - Ostrom, E. et al. (1999). Revisiting the Commons: Local Lessons, Global Challenges. *Science* (*248)*, 278-282 (https://www.researchgate.net/profile/Richard_Norgaard/publication/13102089_Revisiting_the_Commons_Local_Lessons_Global_Challenges/links/0046352af2e0cb03f7000000.pdf)
- Listen to Podcasts:
  - Hot prospects: a sobering IPCC report by The Intelligence from the Economist (From: 1:00 To: 8:00)
  - NPR Planet Money Special Series by David Kestenbaum: http://www.npr.org/templates/story/story.php?storyId=120883813 (4:30)
- Video Assignment
  - Record and post video by Friday by 11:59pm.
  - Comment on a peer's video by Sunday by 11:59pm.
- Watch:
  - Dr. González' video on Chapter 4, Problem #3
  - Dr. González' video on Chapter 4, Problem #5
- Exam
  - Due on Sunday by 11:59pm.

Week 2: The Economics of Environmental Quality

(Learning Objectives 3 and 4)

- Read:
  - F&F Chapter 5 – Sections: Damage Functions; Changes in Damage Functions (pages 81-85); Abatement Cost Functions; Changes in Marginal Abatement Cost Function; Aggregate Marginal Abatement Costs (pages 87,90-94); Social Efficient Level of Emissions (pages 94-98); Enforcement Costs (pages 98-99); and The Equimarginal Principle Applied to Emission Reductions (pages 99-101)
  - F&F Chapter 6 – Sections: Cost-Effectiveness Analysis (page 106); Benefit-Cost Analysis (pages 108-115 – stop before Choice of Discount Rate)
- Reading Quiz:
  - Due on Tuesday by 11:59pm.
- Read:
  - Stavins, R. (2014). What are the Benefits and Costs of EPA's Proposed CO2 Regulations? *A Blog by Robert Stavins*. June 19th. http://www.robertstavinsblog.org/2014/06/19/what-are-the-benefits-and-costs-of-epas-proposed-co2-regulation/
- Listen to Podcast:
  - Lives Vs. The Economy by NPR Planet Money (Aired on 4/15/2020; 25:21)
- Video Assignment:
  - Record and post video by Thursday by 11:59pm.
  - Comment on a peer's video by Saturday by 11:59pm.
- Watch:
  - Dr. González' video on Chapter 5, Problem #2
  - Dr. González' video on Chapter5, Problem #4
- Exam:
  - Due on Sunday by 11:59pm.

Week 3: Benefit-Cost Analysis

(Learning Objectives 4, 5, and 6)

- Read:
  - Benefits: F&F Chapter 7 – Everything, but **skip** sections: Materials Damage;
  - Costs: F&F Chapter 8 – Sections: The With/Without Principle; A Word on Social Costs; The Distribution of Costs; Concepts of Costs (pages 148-152); The Effect of Output Adjustment Costs; Long-Run Technical Change on Pollution-Control Costs (pages 158-160)
- Reading Quiz:
  - Due on Tuesday by 11:59pm.
- Watch Videos:
  - Valuation of Environmental Benefits: **Classes of Values** by *The Conservation Strategy Fund*: https://www.youtube.com/watch?v=q8AZHtF2f50 (7:04)
  - Valuation of Environmental Benefits: **Travel Cost Method** by *The Conservation Strategy Fund*: https://www.youtube.com/watch?v=AjcQpzIBu1I (3:54)
  - Valuation of Environmental Benefits: **Hedonic Pricing Method** by *The Conservation Strategy Fund*: https://www.youtube.com/watch?v=LkXVCQam5kw (2:54)
  - Valuation of Environmental Benefits: **Contingent Valuation** by *The Conservation Strategy Fund*: https://www.youtube.com/watch?v=__xzmIG4L8s (7:28)
  - This country isn't just carbon neutral – it's carbon negative by Tshering Tobgay (TED Talk filmed in February 2016) (18:46)
- Listen to Podcast:
  - Listen to NPR Planet Money Episode 433 – Holding a Rainforest Hostage (Update) (Aired on 8/30/2013): http://www.npr.org/sections/money/2013/08/30/217183518/episode-433-holding-a-rainforest-hostage-update (18:37)
- Poll
  - Due on Wednesday by 11:59pm.
- Video Assignment:
  - Record and post video by Thursday 11:59pm.
  - Comment a peer's video by Saturday 11:59pm.
- Exam
  - Due on Sunday by 11:59pm.

Week 4: Coase Theorem and Command and Control Policies

(Learning Objective 7)

- Read:
  - F&F Chapter 10 – Sections: Property Rights; Problems with Property Rights to Internalize Externalities (pages 183-189)
- Watch:
  - The Coase Theorem by *Marginal Revolution University:* https://www.youtube.com/watch?v=00HPak2RLlQ (8:15)
- Read:
  - F&F Chapter 10 – Section: Voluntary Action (only Moral Suasion subsection pages 189-191)
  - F&F Chapter 11 – Everything (pages 202-217), but **skip** the following subsections: Enforcing Technology Standards and Enforcing Agency
- Reading Quiz
  - Due on Tuesday 11:59pm.
- Read:
  - "The economics of reclining your airplane seat aren't so easy" by James Johnson. *The Washington Post*. 9/8/2014
- Listen to Podcast:
  - "The Last Straw" by the NPR Planet Money (Published on 7/12/2018; Duration 10:23)
- Video Assignment:
  - Record and post video by Thursday by 11:59pm.
  - Comment on Peers' Video by Saturday by 11:59pm.
- Watch:
  - Dr. González' Video on Chapter 11 - Review
- Exam
  - Due on Sunday by 11:59pm.

Week 5: Incentive-Based Policies: Taxes and Subsidies

(Learning Objective 7)

- Read:
  - F&F Chapter 12 - all
- Reading Quiz
  - Due on Tuesday by 11:59pm.
- Read:
  - "License Plate–Based Driving Restrictions Programs: Where Do They Make Sense?" by Allen Blackman published by Resources Magazine on 11/4/2020: https://www.resources.org/common-resources/license-platebased-driving-restrictions-programs-where-do-they-make-sense/
- Listen to Podcast:
  - Episode 949: The Pigou Club by NPR Planet Money (Aired on 11/1/2019; Duration: 21:35)
- Watch:
  - Understanding Carbon Tax with Professor Catherine Hausman (Aired on 9/22/2022; Duration 3:02)
- Video Assignment:
  - Record and post video by Thursday by 11:59pm.
  - Comment on peer's by Saturday by 11:59pm.
- Watch:
  - Dr. González' video on Chapter 12 – Review
  - Dr. González' video on Chapter 12 – Problem #6
- Exam
  - Due on Sunday by 11:59pm.

Week 6: Incentive-Based Policies: Pollution Trading Agreements, Behavioral Approaches & Environmental Justice

(Learning Objective 7)

- Read:
  - F&F Chapter 13 (pages 245-260)
  - F&F Chapter 14 – Sections: Nonpoint-Source Water Pollution Control; Total Maximum Daily Load Program; and Emission Trading in Water Pollution Control (pages 282-289)
  - F&F Chapter 18 - Section: Incentive-Based Approaches for Reducing Greenhouse Gas Emissions (pages 371-372)
- Reading Quiz
  - Due on Tuesday by 11:59pm
- Watch:
  - Trading Pollution: How Pollution Permits Paradoxically Reduce Emissions by Marginal Revolution University (Aired on 3/18/2015; Duration: 4:08)
  - A Deeper Look at Tradeable Allowances by Marginal Revolution University (Aired on 3/18/2015; Duration 6:00)
  - Alex Laskey: How behavioral science can lower your energy bill. (Aired on 6/4/2013; Duration: 8:11)
  - Environmental Justice by Lala Ma (Duration: 6:21)
- Video Assignment:
  - Record and post video by Thursday by 11:59pm.
  - Comment on peer's video by Saturday by 11:59pm.
- Watch:
  - Dr. González' video on Chapter 13 – Review
  - Dr. González' video on Chapter 13 – Problem #3
- Exam
  - Due on Sunday by 11:59pm

Week 7: International Environmental Agreements

(Learning Objectives 8 and 5)

- Read:
  - F&F Chapter 18 - Sections: International Efforts in Global Warming; The Kyoto Protocol; The Paris Agreement; and Estimating the Social Cost of Carbon (pages 349-353).
  - F&F Chapter 19 (pages 359-377).
- Reading Quiz
  - Due on Tuesday by 11:59pm.
- Watch:
  - Suhhdev, P. (2011). "Put a value on nature!" Ted Talk. Filmed on July 2011: https://www.ted.com/talks/pavan_sukhdev_what_s_the_price_of_nature (16:31)
  - Halstead, T. (2017) "A climate solution where all sides can win" Ted Talk. Filmed on April 2017: https://www.ted.com/talks/ted_halstead_a_climate_solution_where_all_sides_can_win?language=en#t-129845 (13:07)
- Listen to Podcast:
  - Can Corporations Stop Climate Change? By NYT Daily (Aired on 2/24/2020; From: 0:00 To: 26:10)
- Video Assignment:
  - Record and post video by Thursday by 11:59 pm.
  - Comment on peer's video by Saturday by 11:59 pm.
- Exam
  - Due on Sunday by 11:59 pm.
- Final Written Assignment:
  - Due on Sunday by 11:59 pm.

7. Expectations:

An online course requires students to be in control of their learning. As students, you expect that I designed this online course in such a way that it facilitates an appropriate learning environment. I have taken substantial time to prepare the course and have designed several activities that will allow you to learn about environmental economics and policy. For students to succeed in this course, students are expected to:

a) take control of their learning.
b) strictly follow the detailed course schedule and submit every assignment on time. I highly recommend that students review deadlines daily. Students might want to print the course schedule and cross off completed assignments or they might want to log in to the course page daily and review deadlines.
c) read the textbook carefully, pausing to understand the models, the graphs, and the tables described in each chapter.
d) watch the videos I recorded, pausing and re-watching as needed to fully understand the material. You might want to try the problems on your own before and after watching the videos.
e) ask for help if needed.
f) read any additional assigned articles, connecting course material to the content.
g) listen to the podcast episodes and watch the assigned videos, paying careful attention and trying to connect course material.
h) be insightful and support arguments using environmental economics theory.
i) be respectful and constructive when replying to your classmates' discussion posts and videos.
j) manage their time efficiently. This course encompasses materials that would typically be covered in a 15-week semester. Due to the rapid nature of the course, students must manage their time and carefully plan their schedules to have enough time to process the new material and to complete every assignment. Allow for about 20-22 hours per week for this course.

8. Online Communication Guidelines:

Communication with the instructor:

- It is important to remember that while the Internet is available 24 hours a day, the instructor and other students are not. Students can expect that I will respond to e-mail messages within 24 and 48 hours.
- It is important to remember that I will not be able to perceive the non-verbal cues that students display in the traditional face-to-face classroom. In other words, I won't be able to see whether students are confused. Students **must communicate** if they need more help. Students must initiate communication early and be specific about the material that is not understood or the source of confusion.

9. 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.

AI Chats: I encourage students to use ChatGPT and other AI chats as a learning device. It is particularly helpful to simplify concepts and offer explanations. 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. AI Chats are not allowed to be used during quizzes, exams, or video responses/comments.

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.

10.The Center for Academic Success

The Center for Academic Success (CAS) is committed to providing student-centered programs and initiatives designed to enhance learning and promote success and persistence for all Manhattan University students. Students will work collaboratively with qualified peers and professionals to develop knowledge, skills, and strategies needed for success in the classroom and beyond. The CAS has two locations: the Learning Commons in Thomas Hall 3.10 and the Leo Learning Center in Leo 117/118. Services include online and in-person individual tutoring, online small group peer tutoring (select courses), Supplemental Instruction (select courses), student academic success coaching, and online writing center services. All services are free of charge and available to all Manhattan University students. Appointments are preferred , but walk-ins are welcome. 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. For more information about these services please visit the CAS webpage here.

11.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 an appointment to speak with someone at the Specialized Resource Center.

***Potential Changes:** All details provided in this syllabus are subject to change at my discretion.