



THE CATHOLIC UNIVERSITY OF AMERICA

DEPARTMENT OF ECONOMICS

Fall, 2021

ECONOMICS 350: Environment and Economics

CREDIT HOURS: 3

PREREQUISITES: The Student is expected to know introductory and intermediate microeconomics and macroeconomics.

CLASSROOM: McMahon 312

CLASS SCHEDULE: Mondays, 5:30 pm – 8:00 pm

PROFESSOR: Rachael K. Behr

EMAIL: behr@cua.edu

OFFICE HOURS: Office hours are available before class on Mondays from 3:30-5:15pm in the economics department offices in McMahon 307.

I am flexible and happy to meet with you and work around your schedule. I can meet on Zoom most other days/times of the week if those office hours do not work for your schedule.

COURSE DESCRIPTION: This course investigates core economic principles and theories pertaining to environmental economics. The main goal is to use the economic way of thinking as it relates to environmental issues. In addition, a second aim is to help you use economic tools to understand and analyze the costs and benefits of various environmental policies. The economic way of thinking is not only applicable to environmental issues, but a wide array of social issues. This should be helpful to anyone who wants to understand and analyze social problems in a variety of contexts.

The lectures and discussions in this course are a way to apply the economic way of thinking. This class is based mainly in positive analysis and somewhat in normative analysis. In other words, we will focus primarily on “what is,” and secondarily on “what should be.” All discussions will be framed around economic principles. Active participation in the class is encouraged and expected.

This class will support a diversity of perspectives, so please remember to be respectful of other people’s opinions and observations, and to challenge your own perspective as the course progresses.

INSTRUCTIONAL METHODS: In-person; combination of lectures, debates, discussions, and readings.

TEXT: Students will need to buy, rent, or borrow the following book:

- Tom Tietenberg & Lynne Lewis. *Environmental and Natural Resource Economics*. Tenth Edition, 2015. (Do not buy the eleventh edition. It is vastly more expensive and will not match up with the assigned readings.) (Referred to as ENRE in syllabus)
- Additionally, articles, book chapters, and podcasts will be assigned during the semester as supplements to the main textbook and are accessible online. The links to these are listed in the schedule below.

COURSE GOALS AND GOALS FOR STUDENTS LEARNING: Upon completion of this course, you will

1. Have a solid introduction to economic issues concerning environmental issues
2. Have an improved understanding of the functioning of economic institutions, property rights, and markets and how these generate incentives and constraints for human behavior
3. Have a better understanding of fundamental economic theories, tools, and modeling

COURSE REQUIREMENTS: Grades will be based on the following items

- Homeworks & Quizzes (15%)
- Classroom Debates & Discussions (15%)
- Research Paper (25% -- 15% on the paper, 10% on the presentation): December 13th
- Midterm Exam (20%): October 18th
- Final Exam (25%): TBD
- Extra Credit Opportunity (up to +5% to your lowest exam score)

Homeworks & Quizzes: The readings and other multimedia listed under each week must be completed *prior* to coming to class. **You will be unprepared for class discussions and be asked to leave if it is clear that you have not done the readings.** Plan on assigned readings taking anywhere from 2-4 hours a week. There will occasionally be assigned homework assignments, but the emphasis each week is on the readings. You will be unsuccessful in class if you attend without having done the readings.

There will be weekly quizzes at the beginning of each class over the assigned readings. If you are late to class or do not attend class, you will miss the quiz. Only excused absences (e.g., a doctor's note) will excuse your quiz. Quizzes begin after the first week of classes.

Classroom Debates & Discussions: Most weeks, we will have classroom debates and discussions. Come prepared to defend your ideas, learn from others, and participate in the discussion. Topics are announced in the outline of course events below. If it is listed below as a 'debate' I will expect you to choose a side of the argument and each side of the classroom will debate against the other. If it is listed as a 'discussion' we will have break-out groups and then come together for larger class discussions.

Research Paper & Presentation: There is a term paper and presentation for our course. Detailed instructions will be handed out during the first several weeks of the course.

The term paper is due on **December 13th in class, which is the same day as the in-class presentation.** You must clear your project idea with me on or before November 15th, in office hours or before/after class.

Midterm Exam: The purpose of the midterm exam is to demonstrate an understanding of the economic

principles and their application to environmental issues that have been taught to that point. The exam will consist of multiple-choice questions, definitions, short-answer questions, and essay questions. The topics covered on the test will be based on the readings and the class lectures/discussions. Make-up midterm exams will only be given to students who contact me about an emergency before the exam. The midterm will be in class on **October 18th, 2021**.

Final Exam: The purpose of the final exam is to demonstrate a comprehensive understanding of economic and environmental principles that were taught throughout the course. The exam will consist of multiple-choice questions, definitions, short-answer questions, and essay questions. The topics covered on the test will be based on the readings and the class lectures/discussions, and it will be a cumulative exam with emphasis on content learned after the midterm. There will be no make-up final exams, except for extreme circumstances that will be decided on a case-by-case basis. The final exam date will be announced once the university has released the schedule.

Extra Credit Opportunity: Attend one of the following two webinars: “Liberty, Ecology, and Security” by Catherine Semcer on Sept. 23, at 3pm 2021, OR “The Essential Coase” by Lynne Keisling on Sept. 29, 2021, at 3pm. Following the seminar, you should send me a 1-2-page writeup of your main takeaways from the discussion, how it fits into class content, and your agreements or disagreements with the arguments presented. You must register for the webinars to get the zoom link. Register here: <https://www.fraserinstitute.org/education-programs/students/upcoming-events?language=en>

Students are expected to turn in assignments in class at the beginning of the scheduled due date or earlier. Assignments are expected to be neat, clear, and legible. I reserve the right not to accept sloppy assignments. **Late assignments will not be accepted. No final project will be accepted after the due date.**

Class attendance: Attendance will be taken at the beginning and also recorded following each class. Students need to be on time for class. A delay of more than 7 minutes will be considered an absence. Leaving in the middle of and later joining a session will also be considered an absence. **Students with more than 2 absences will be required to drop the course,** otherwise, a grade of “F” will follow.

Class participation is graded. A portion of the course grade is based upon the significance and quality of your contribution to the class discussions and debates. Therefore, you are expected to be prepared for class. Students who do miss an occasional class are responsible for getting the notes and finding out what they missed, including any pertinent announcements and/or homework assignments.

PLAN FOR PROFESSOR ILLNESS: If the professor becomes ill and is unable to lead class, you are responsible for completing the assigned readings for the week and any homework assignments or discussion questions that might be posted. The professor may also give assignments or additional readings to be completed during her absence.

OTHER EXPECTATIONS AND POLICIES

ACADEMIC HONESTY: Academic honesty is expected of all CUA students. Faculty are required to initiate the imposition of sanctions when they find violations of academic honesty, such as plagiarism, improper use of a student’s own work, cheating, and fabrication.

The university’s policies and procedures for academic integrity are strict and are found here:

<http://policies.cua.edu/academicundergrad/integrityfull.cfm>

<http://policies.cua.edu/academicundergrad/integrityprocedures.cfm>

Specifically, the policy states that:

“C. This policy applies to all academic conduct in the broadest sense, including submitted drafts and final coursework, research, comprehensive examinations and the preparation of theses or dissertations.”

And that:

“III. Categories of Academic Dishonesty

The following are the major categories of academic dishonesty:

A. Plagiarism is the act of presenting the work or methodology of another as if it were one's own. It includes quoting, paraphrasing, summarizing or utilizing the published work of others without proper acknowledgment, and, where appropriate, quotation marks. Most frequently, it involves the unacknowledged use of published books or articles in periodicals, magazines, newspapers and electronic media. However, any unacknowledged use of another's words, ideas or electronic processes constitutes plagiarism, including the use of papers written by other students, oral presentations, interviews, radio or TV broadcasts, any published or unpublished materials (including Web-based materials, letters, pamphlets, leaflets, notes or other electronic or print documents), and any unauthorized or inadequately credited use of foreign language, scientific and/or mathematical calculation and/or modeling programs or online services.

B. Improper use of one's own work is the unauthorized act of submitting work for a course that includes work done for previous courses and/or projects as though the work in question were newly done for the present course/project.

C. Fabrication is the act of artificially contriving or making up material, data or other information and submitting this as fact.

D. Cheating is the act of deceiving, which includes such acts as receiving or communicating or receiving information from another during an examination, looking at another's examination (during the exam), using notes when prohibited during examinations, using electronic equipment to receive or communicate information during examinations, using any unauthorized electronic equipment during examinations, obtaining information about the questions or answers for an examination prior to the administering of the examination or whatever else is deemed contrary to the rules of fairness, including special rules designated by the professor in the course.

E. Attempts to engage in any of the conduct described above or the facilitation of any of this conduct by another individual will be treated as conduct constituting academic dishonesty for purposes of this policy.”

The following sanctions are presented in the University procedures related to Student Academic Dishonesty (from <http://policies.cua.edu/academicundergrad/integrityprocedures.cfm>): “The presumed sanction for undergraduate students for academic dishonesty will be **failure for the course**. There may

be circumstances, however, where, perhaps because of an undergraduate student's past record, a more serious sanction, such as suspension or expulsion, would be appropriate."

MAKE-UP POLICY AND HOMEWORK DEADLINES: Students will NOT be allowed to write an exam in advance of its scheduled date. A student who misses a test will be allowed to write a make-up test only if s/he provides a medical certificate showing a physical incapability to write the test or an official university certificate that the student was representing in a university sponsored event. **Late assignments will not be accepted, and no final project will be accepted after the due date.**

EXCUSED CLASS ABSENCES: A student who misses a class will be excused, and that absence will not count towards the two allowed in the semester, only if s/he provides a medical certificate showing a physical incapability to attend or an official university certificate that the student was representing in a university sponsored event.

DRESS CODE: Since you are in college and preparing for your future profession, I will request you come to class dressed appropriately. For your final paper-presentation, a business professional outfit is required.

ELECTRONIC DEVICES: The use of electronic devices is strictly prohibited in class. The only exception is when class exercises are ongoing, and the professor will specifically request their use. Otherwise, keep your electronic devices silent and put away.

CAMPUS RESOURCES FOR STUDENT SUPPORT

Academic Support Services

The university's primary academic support resources are located on the 2nd floor of the Pryzbyla Center. These affiliated offices and services include:

The Undergraduate Advising Center offers guidance to all undergraduates, especially first-year students, as they move toward their academic goals.

Phone: (202) 319-5545 **Email:** cua-advising@cua.edu **Web:** advising.cua.edu

The Center for Academic Success provides academic support services for all students through a broad base of programs and services, including Tutoring Services, Workshops, Academic Coaching, Individual Skills Meetings, Peer Mentoring, and more.

Phone: (202) 319-5655 **Email:** cua-academicssuccess@cua.edu **Web:** success.cua.edu

The Writing Center provides free, one-on-one consultations with trained graduate instructors for writing projects across all disciplines at any stage of the process, from brainstorming to revising. Appointments in the main location, 202 Pryz, can be scheduled in advance online (<http://english.cua.edu/wc/>). Drop-in appointments are also welcome based on availability in the Pryz and at the satellite location in the Mullen Library Lobby (see website for days and hours).

Phone: (202) 319-4286. **Email:** cua-writingcenter@cua.edu **Web:** english.cua.edu/wc/

Disability Support Services provides programs and services designed to support and encourage the integration of students with disabilities into the mainstream of the university community.

Phone: (202) 319-5211. **Email:** cua-disabilityservices@cua.edu **Web:** dss.cua.edu

The Counseling Center provides free individual and group counseling services, psychiatric consultation, alternative testing, and emergency services to CUA students. In addition, we provide consultation services and outreach programs to the CUA community. Appointments can be scheduled in person in 127 O'Boyle Hall, or by phone.

Phone: (202) 319-5765. Web: counseling.cua.edu

ASSESSMENT

The grading scale applied to this class is as follows:

A 96-100	C+ 71-75
A- 91-95	C 66-70
B+ 90-86	C- 60-65
B 81-85	D 55-59
B- 76-80	F 54-0

There is no curve applied to the grading.

University grades: The University grading system is available at <http://policies.cua.edu/academicundergrad/gradesfull.cfm#II> for undergraduates.

Reports of grades in courses are available at the end of each term on <http://cardinalstation.cua.edu> .

COURSE OUTLINE AND READINGS

I reserve the right to make adjustments if it becomes necessary, but I will limit changes as much as possible. If a change in schedule occurs, I will email an announcement and make an in-class announcement, so please check your email regularly and come to class regularly.

The listed readings under each week should be done **before** coming to class.

Week 1, August 30: Class Intro, The Economic Way of Thinking, Market & Government Failures

- ENRE, Chapters 1 & 2.
- “[The Role of Property Rights as An Institution: Implications for Development Policy](#)” by Karol Boudreaux
- “[The Problem of Social Cost](#)” by Ronald Coase (only pp. 1-10)
- “[Public Choice](#)” by William F. Shughart II

NO CLASS September 6, Labor Day

Week 3, September 13: Efficiency, Optimality, & Valuing the Environment

- ENRE, Chapters 3 & 4
- “[Markets and the Environment: Friends or Foes?](#)” by Terry Anderson
- Debate: Can we (and should we) price the environment? (See Debates 4.1, 4.4., & 4.5)

Week 4, September 20: Energy & Monopolies

- ENRE, Chapter 7
- “[The Need for Electricity Retail Market Reforms](#)” by Kiesling and Giberson
- “[How the Texas Power Grid Failed](#)” CNBC
- Debate: Renewable energy – to subsidize or not to subsidize?
- Discussion: What happened in Texas? Are markets, regulation, both, or something else to blame? How is prepping for a pandemic similar to prepping for a winter storm in Texas – and how can public choice help us answer that question?

Week 5, September 27: Water: Markets or Not?

- ENRE, Chapter 9
- “[David Zetland on Water](#),” EconTalk podcast
- “[Appropriators versus Expropriators: The Political Economy of Water in the West](#)” by Cuzan, in Anderson et al.
- Debate: Is pricing water moral, or is water a basic human right? Should water systems be privatized? (See Debates 9.1 and 9.2)

Week 6, October 4: Land & Forest Management; Ecotourism

- ENRE, Chapters 10 & 11; Chapter 13 (only pp. 327-329; 334-335)
- “[Two Forests Under the Big Sky](#)” by Berry
- “[Turning a Profit on Public Forests](#)” by Leal
- “[Is Yellowstone National Park In Danger Of Being ‘Loved To Death’?](#)” NPR Podcast from April 18, 2016
- “[Your Next High-End Safari Destination: The Plains of Montana](#),” by Brad Wieners
- Debate: is pricing environmental access moral? Should national parks & forests be privatized?

NO CLASS October 11, Columbus Day

Week 8, October 18: *Midterm Exam*

- Midterm exam in-class 5:30pm
- You will have all of class time to take the exam

Week 9, October 25: *Common Pool Resources & Fisheries; Wild (and Endangered) Animals*

- ENRE, Chapter 12; Chapter 13 (only pp. 336-339)
- “[Homesteading the Oceans](#)” by Leal
- “[Institutions and the Environment](#)” by Elinor Ostrom
- “[Who Owns Endangered Species?](#)” by Shogren and Parkhurst (only pp. 195-203)
- “[Private Property Rights to Wildlife: The Southern African Experiment](#)” by Muir-Leresche and Nelson
- Debate: Should we privatize ownership of wildlife? Is trading ivory ethical? (See Debates 12.2 and 13.5)
- Discussion: what is the best solution (out of the many proposed in readings and lecture) for our fishery crisis?

Week 10, November 1: *Is Population a Problem?*

- “[Population Growth and Earth’s Human Carrying Capacity](#)” by Joel Cohen
- “[The Population Bomb](#)” Smithsonian Magazine
- “[The Population Bomb 50 Years Later](#)” Podcast at Stanford University with Erlich
- “[Deconstructing the Population Bomb](#)” by Desrochers
- “[Julian Simon and the ‘Limits to Growth’ Neo-Malthusianism,](#)” by Paul Dragos Aligica
- Debate: Who is right: Simon or Erlich?
- Discussion: What should we do about population? Is there a carrying capacity to earth?
- Don’t forget: you must clear your research project with me on or before November 15th

Week 11, November 8: *Air & Water Pollution*

- ENRE, Chapters 15, 17, & 18
- Discussion: What is your proposed, *marginal* solution to air pollution? And for water pollution? What are your thoughts on the best and worst policies from the readings?

Week 12, November 15: *Climate Change*

- ENRE, Chapter 16
- “[Climate Change: The Ultimate Tragedy of the Commons?](#)” by Paavola (edited by Cole and E. Ostrom)
- “[Interview with Nobel prize winner Elinor Ostrom on climate change,](#)” Irin News
- Debate: Is greenhouse gas trading immoral? (See Debate 16.2)
- Debate: To adapt to and/or mitigate climate change, should we use international laws or polycentric governance?

NO CLASS November 22: *Climate Change, continued*

- We will not meet this week, but you are still responsible for the following content:
- Listen to “[John Christy and Kerry Emanuel on Climate Change](#)” a debate on EconTalk
- Listen to “[Bjorn Lomborg on the Costs and Benefits of Attacking Climate Change](#)” EconTalk

- Based on these EconTalks and last week’s class, come up with one or two solution(s) that mitigates some aspect of climate change. It can be through market changes, government interventions, institutional tweaks, or some mix thereof. A 4-page written report on what your solution is, how it will address an aspect of climate change, and how it ties into class content (including the podcasts and readings) is due by Monday, November 22nd at 11:59pm to my email.
 - Requirements: standard, 12-point font, 4 pages double-spaced, 3+ credible sources with Chicago citation; you may work in groups of 2 or by yourself.

Week 14, November 29: *Environmental Justice & Toxic Substances*

- ENRE, Chapter 19
- “[Flint, Michigan Water Crisis: A Case Study in Regulatory Failure](#),” by Butler, Scammell, and Benson
- “[Environmental Justice](#)” by Mohai, Pellow, and Roberts
- Discussion: What are some economic solutions to environmental justice? What are some solutions to the Flint water crisis? Is environmental justice something economists should be discussing, or is it best left to policymakers?

Week 15, December 6: *The Quest for Sustainable Development & Visions for the Future; Class Wrapup*

- ENRE, Chapters 20 & 21
- “[The Property Rights Path to Sustainable Development](#)” by Terry Anderson and Laura Huggins
- Discussion: what is our best path forward for sustainable development?
- There will be reserved time at the end of class for final exam questions and research paper/presentation questions

Week 16, December 13: *Research Papers & Presentations*

- Final research papers due and presented in class

Final Exam: TBA once the University has released the exam schedule.