ECON 335: Environmental Economics

Course Information Contact

Term: Spring 2022 Instructor: Chandler Reilly

Course: ECON 335-001 Office: Department of Economics

Class time: R: 7:20-10:00PM James Buchanan Hall, PPE 1A1

Location Enterprise Hall 274 Email: creilly8@gmu.edu

Overview

This course uses microeconomic theory to understand environmental issues. We will discuss topics ranging from how property rights can aid in maintaining the populations of endangered animals to carbon taxes as a way to reduce pollution.

The class will consist of weekly lectures where I will go over content for the week, give quizzes, and take any questions you all might have. You should read the textbook and supplementary material I am covering that week *before* lecture. Come prepared with questions and ready for discussion. Lectures will generally go until about 8:45 PM and be followed by a short break. After the break, we will return to class and have a discussion of that week's material. Participation in discussion is mandatory and will make up a substantial portion of your grade as detailed below. I will post problem sets and supplemental content on Blackboard. To login to your Blackboard account go to mymasonportal.gmu.edu and use your Mason NetID to access the course. If you are unfamiliar with using Blackboard please see this helpful online course (note that you must be logged in to Blackboard to access the online help material). You can also email me if you are having any issues.

The course will be broken up into two parts. The first part will focus on the economic concepts that we will use to help us understand environmental issues covered in the second part of the course. We will spend five weeks learning these concepts followed by the midterm exam during week 7 of the course. Refer to the course schedule at the end of the syllabus for details on the topics we will cover. In the second part of the course we will spend the remaining 8 weeks learning about a variety of topics that environmental economists study using the concepts from the first half of the course. These topics will be a good starting point for you to think about what you want to write your current event journals on.

In the event that we have to move the class online due to a change in university policy regarding COVID, we will meet over Zoom during our normal meeting times. I will continue to hold virtual office hours by appointment and all assignments will be submitted on Blackboard. The only other change that will occur is that you would take all quizzes and exams virtually on Blackboard. My hope is that we will not have to do this. If weather conditions lead to university closure on the day of a class meeting we will also move to virtual meeting.

We will cover a lot of material over the course of the semester and it is important that you do not fall behind. Even if you have already been exposed to some of the early material, I want to encourage everyone to take notes and ask questions before we have moved on to new material. The concepts we will be learning build upon each other so the more you fall behind the more difficult the content will become.

Required Text

Environmental and Natural Resource Economics, 11e by T. Teitenberg & L. Lewis Physical copy or eBook.

Additional readings will be assigned that I will post directly on Blackboard for everyone to download.

Recommended Text

Universal Economics by A.A. Alchian & W.R. Allen

Prerequisites

The prerequisites for this class are ECON 103 and ECON 104. We will review some economic concepts you are familiar with but if you feel you are lacking in economics background here are some online sources that will help with the material covered in this class,

 Marginal Revolution University: Intro to Microeconomics, Demand Curves, Supply Curves, Prices, Externalities

Safe Return to Campus

All students taking courses with a face-to-face component are required to follow the university's public health and safety precautions and procedures outlined on the university Safe Return to Campus webpage. Similarly, all students in face-to-face and hybrid courses must also complete the Mason COVID Health Check prior to coming to campus. The COVID Health Check system uses a color code system and students will receive either a Green, Yellow, Red, or Blue email response. Only students who receive a "green" notification are permitted to attend courses with a face-to-face component. If you suspect that you are sick or have been directed to self-isolate, please quarantine or get testing. Faculty are allowed to ask you to show them that you have received a Green email and are thereby permitted to be in class.

Students are required to follow Mason's current policy about facemask-wearing. As of August 11, 2021, all community members are required to wear a facemask in all indoor settings, including classrooms. An appropriate facemask must cover your nose and mouth at all times in our classroom. If this policy changes, you will be informed; however, students who prefer to wear masks will always be welcome in the classroom.

Technology Requirements

The course will require a laptop, desktop, or tablet device and internet connection to complete assignments and access the course on Blackboard. If you desire to do video calls with me to discuss homework or other material you will need a web cam and microphone. I know that internet can be unreliable when it comes to video calls but do not let that stop you from reaching out to me for help. Whether it is over email or through some other arrangement we can work together to make sure you are getting the help you need to succeed in this course. A calculator (scientific or graphing) will be required for exams.

Grading and Coursework

Your course grade will be made up of the scores you receive on quizzes, problem sets, participation in class discussions, a midterm exam, two current event journals, and a final, with weights distributed as shown in the table.

Category	Percentage
Quizzes	5%
Problem Sets	15%
Participation	20%
Midterm	20%
Current Event Journals	20%
Final	20%

- Quizzes: Every week we meet there will be a short quiz on the readings for that week. If you have done the reading and looked at the slides you should get 100% on every quiz. Quizzes will be given in the first ten minutes of class on a quiz day. If you show up late to class on the day of a
- **Problem sets:** There will be four problem sets assigned throughout the semester. These problem sets will cover the end of chapter discussion questions and "test yourself" questions from your textbook. Problem sets will be turned in on Blackboard by Friday at 11:59PM the week they are due as shown on the course schedule below. You are free to complete the problem sets as a group. If you do complete the problems as a group, each group member must write/type up their own set of answers to be turned in. I will make myself available over email or Zoom to go over any questions. Your lowest problem set score will be dropped from your final grade.

quiz you will be receive a 0. The first quiz will be during the second week of class.

- Participation: Every week, the second half of class will be spent discussing the readings for that week. Most weeks we will frame the discussion around a debate prompted in the text. You will be expected to consistently contribute to the conversation. I expect everyone to remain respectful of each other's views during these discussions. Even though discussions will often be prompted by a debate, the goal is not to arrive at some correct answer through argumentation. Rather, we should be exploring the topics at hand and learning how to understand those topics through the economic lens.
- Midterm: The midterm will consist of multiple choice, true/false, and longer answer questions. The exam will be administered online over Blackboard and you will be able to use your notes, textbook, and other materials to help you.
- **Final:** The final exam is on **Thursday, May 12, 2022 from 7:30PM-10:15PM** and will be inperson. The exam is cumulative but with more weight given to the second half of the course. The final will also be open book, open note. If your score on the final is higher than your score on the midterm, I will replace the midterm score with your final score. For example, if you scored a 70% on the midterm but receive a score of 95% on the final, when I enter in your final grades you will have a 95% on both the midterm and the final. This is equivalent to shifting the grade weight of the midterm to the final.
- Current event journals: There will be two current event journal assignments. See the course schedule for dates. These journals will summarize and analyze a current event (from the last six months or so) related to environmental economics using the concepts learned in class. 3-4 pages in length. I will post a full list of requirements on Blackboard the first few weeks of class. Your topic must be approved by me within two weeks of the due date for each journal.
- **Grading Scale:** The letter grade you receive will be based on the weighted average of all quizzes, your participation, problem sets, midterm exam, journals, and the final exam according to the scale in the table below.

Letter Grade	Percentage
A+	97-100%
A	93-96%
A-	90-92%
B+	87-89%
В	83-86%
B-	80-82%
C+	77-79%
С	73-76%
C-	70-72%
D	60-69%
F	<60%

Late Work

Missed exams will result in a 0. Exams cannot be made up. If you miss the midterm, the weight for that exam will be added to the final exam. The time for the final exam is set by the university and cannot be changed, plan accordingly. Missed quizzes will result in a 0. Problem sets and current event journals turned in up to 24 hours after the due date will receive half credit. For example, if you were to receive an 80% on your problem set but it is turned in late (within 24 hours) you will receive a 40%. Problem sets and current event journals turned in more than 24 hours after the due date will receive a 0. If you miss class or cannot complete an assignment because you are isolating after being exposed to or testing positive for COVID, please email me ASAP and I will make exceptions depending on the circumstances.

Office Hours and Communication

Office hours by appointment. I will send out more information about meeting on Zoom during the first week of class so we can coordinate on individual office hours as well as group meetings if desired. If you have any difficulties using the video conferencing software because of internet difficulties or other reasons please let me know and I can make separate accommodations. You can also email me about any questions you have. Be sure to use your GMU email and put ECON 311 in the subject line. I will usually get back to you within 24 hours. If you feel I have missed your email keep sending me emails until I respond.

Technology Policy

Laptops are permitted during class to follow along with the lecture slides and take notes. Recording devices will **not** be permitted during lecture. Phones should be put away and silenced. If you would rather be on your phone than in class, then don't come to class. Please be courteous of your fellow students.

Special Accommodations

Disability Services at George Mason University is committed to providing equitable access to learning opportunities for all students by upholding the laws that ensure equal treatment of people with disabilities. If you are seeking accommodations for this class, please first visit the GMU Disability Services Office for detailed information about the Disability Services registration process. Then

please discuss your approved accommodations with me. Disability Services is located in Student Union Building I (SUB I), Suite 2500. Email: ods@gmu.edu | Phone: (703) 993-2474

Academic Dishonesty

Cheating will not be tolerated and can result in a failing grade, dismissal from class, and expulsion from the university. If I suspect you of cheating, I will seek the appropriate punishment under George Mason University guidelines. Please review the George Mason University Honor System and Code.

Important Dates and Other Links

Refer to the GMU Registrar website for important dates regarding add/drop deadlines and holidays. Information on religious holidays can be found on the Mason University Life website. Please contact me at least two weeks in advance if there is any conflict between the course schedule and your observation of a holiday so we can work together to make the appropriate arrangements.

Student Privacy Rights Learning Services University Libraries Counseling and Psychological Services

Course Schedule

Week	Topic	Readings and Assignments
1: January 27th	Syllabus, course introduction, and review	ENRE: 1 Hayek, "The Use of Knowledge in Society" What is Public Choice? (video)
2: February 3rd	The economic approach	ENRE: 2 Coase, "The Problem of Social Cost" (sec. I-VII) Coase Theorem (MRU video) Harris et al., The Origins and Consequences of Property Rights
3: February 10th	Trade-offs and benefit-cost analysis	ENRE: 3 Buchanan, Cost and Choice PS #1 DUE
4: February 17th	Valuing the environment	ENRE: 4 Anderson, "Markets and the Environment: Friends or Foes? Carden, "Economic Calculation in the Environmentalist Commonwealth"
5: February 24th	Dynamic efficiency and depletable resource allocation	ENRE: 5-6
6: March 3rd	Population	Aligica, "Julian Simon and the 'Limits to Growth' Neo-Malthusianism" Cohen, "Population Growth and Earth's Human Carrying Capacity" Desrochers, "Deconstructing the Population Bomb" Mann, "The Book That Incited a Worldwide Fear of Overpopulation" PS # 2 DUE
7: March 10th	Midterm exam	
8: March 17th	SPRING BREAK	NO CLASS
9: March 24th	Energy	ENRE: 7 Kiesling and Giberson, "The Need for Electricity Retail Market Reforms" Journal # 1 DUE
10: March 31st	Ecosystem goods	ENRE: 13 Cheung, "The Fable of the Bees" Shogren and Parkhurst, "Who Owns Endangered Species?"

Week	Topic	Readings and Assignments
11: April 7th	Land and forests	ENRE: 10-11 Berry, "Two Forests Under the Big Sky" Leal, "Turning a Profit on Public Forests" PS # 3 DUE
12: April 14th	Common pool resources	ENRE: 12 Tragedy of the Commons (MRU video) Ostrom, "Institutions and the Environment" Leal, "Homesteading the Oceans"
13: April 21st	Pollution and abatement	ENRE: 14-16 Trading Pollution (MRU video)
14: April 28th	Climate change	ENRE: 17 Paavola, "Climate Change" PS # 4 DUE
15: May 5th	Toxic substances and environmental justice	ENRE: 19 Mohai et al., "Environmental Justice" Butler et al., "The Flint, Michigan, Water Crisis" Journal # 2 DUE
16: May 12th	FINAL EXAM	

Note: Problem set and journal assignment due dates will not change. However, the course schedule as it is shown here may change if we need to spend more time on a chapter. I will do my best to keep us on track.