

ENVIRONMENTAL ECONOMICS FOR THE CITIZEN

Spring 2024

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| Instructor: | William Hickman | Time: | M/W 12:00-1:15 pm |
| Email: | whickma@gmu.edu | Location: | Music/Theater Building 1006 |

Course Description

Economics is the science of choice. In this course, we will explore how the economic way of thinking applies to various environmental issues. A variety of policies have been proposed for dealing with these issues, and this course will help you assess the consequences, costs, and benefits of these policies.

The economic way of thinking applies to human behavior across a wide range of domains, not just environmental issues. The tools you learn in this course will enhance your understanding of environmental issues, but they are also useful for understanding society in general.

Required Materials

- Terry L. Anderson and Donald R. Leal. 2015. *Free Market Environmentalism for the Next Generation*
- A number of short readings/videos/podcasts will be assigned during the semester as supplements to the main textbook, but these will be accessible online or on Blackboard. The links to the readings/videos/podcasts are listed in the schedule later in this syllabus.

NOTE: You are not required to purchase any reading materials for this course. You are free to do so, but I will provide electronic copies of all materials on Blackboard.

Grade Composition

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|-----------------------------------|-----|
| Class Discussions | 15% |
| Quizzes | 20% |
| Current Event Writing Assignments | 15% |
| Midterm Exam | 30% |
| Final Paper and Presentation | 20% |

Grading Scale

- 97 - 100: A+
- 93 - 96: A
- 90 - 92: A-
- 87 - 89: B+
- 83 - 86: B

80 - 82: B-

77 - 79: C+

73 - 76: C

70 - 72: C-

60 - 69: D

59 and below: F

Grades will be rounded to the nearest whole number. For example, an 89.5 will be rounded to a 90. I do not offer extra credit in addition to your assigned work. If you have questions or concerns about the grade you received on assigned work, please email me with the specific details of your questions or concerns.

Quizzes

Attendance will not be directly taken in this course. However, during some unannounced class sessions, I will give you short quizzes. Each quiz will consist of several short answer and/or multiple-choice questions. I do not intend for these quizzes to be difficult - rather, they will test your understanding of certain key concepts and give you an incentive to attend class. I do not offer makeup quizzes, except in cases where a student misses class due to an emergency. To account for missed quizzes that are not due to emergencies, I will drop the two lowest quiz scores.

Class Discussions

Class discussions will begin starting January 22. The discussions are meant to demonstrate your engagement with the readings as listed below. Come to class prepared to discuss the readings that are listed for each day in the scheduled outline of course events. For example, there are two readings listed on January 22nd. The class discussion on January 22nd will, in part, relate to that reading. The discussion will be partly organic and partly me calling on different students for comments.

Writing Assignments

You will be assigned two current event writing assignments during the semester. Each of these will be two pages long. The purpose of these is for you to apply the economic way of thinking to a current event on an environmental topic. They are also a chance for you to use economic thinking to express your opinion. Grades will not be based on your opinion, but will be based on your ability to persuasively use the economic way of thinking to demonstrate why your opinion is valid. Using the economic way of thinking does not mean that writing has to be boring. The due dates for these papers will be announced well in advance.

More specific instructions and a rubric for the writing assignments will be made available early in the semester. The instructions/rubric will allow you to know what is expected in the assignments and how they are going to be graded.

Midterm Exam

The purpose of the midterm exam is to demonstrate an understanding of the economic principles that have been taught to that point. The exam will consist of multiple-choice and short-answer questions. The topics covered on the midterm exam will be related to those discussed in class, but may involve using the economic way of thinking to analyze specific ideas not discussed in class. Make-up midterm exams will only be given to students who contact me about an emergency before the exam.

Final Paper and Presentation

The purpose of the final paper and presentation is for you to demonstrate your comprehension of economic principles as applied to an environmental topic. Final presentations will be given on April 24th and 29th. This will provide you with an opportunity to receive feedback on your work before turning in your final paper.

The final paper is due on May 6th at 12.00 pm via email. More specific instructions and expectations for the final paper and presentation will be made available early in the semester.

Late Submission Policy

If you do not reach out via email **before** an assignment is due and let me know about the situation, I will not accept late submissions. If you reach out via email **before** an assignment is due and let me know about the situation, I will accept late submissions but there will be a grading penalty. With advance notice, late submissions for writing assignments and exams will receive a 10 percent deduction from the total maximum points of assignment/exam for the first day (24 hours) of being late. Thereafter, all late submissions (with advance notice given) will receive a 50 percent deduction from the total maximum points of assignment for all subsequent days of being late. Exceptions will only be made for emergencies approved in accordance with University policy.

AI Use Policy

ChatGPT and other tools that use artificial intelligence are quickly becoming commonplace. In the “real-world” outside of college, you will likely be using these tools more and more frequently in the coming years. I think AI is fascinating and I think it is a powerful way to accelerate learning and the creation of knowledge. As such, I encourage you to use these tools responsibly to help in the process of completing assignments. There will be no grading penalty for simply using AI, as long as you cite the AI tools you use. Note, however, that you are responsible for the content of the work you submit under your name.

Tentative Class Schedule

Below is the tentative schedule for this class. It is subject to change - the best way to stay up to date is to check your email and/or Blackboard announcements frequently. I will send out announcements via Blackboard if and when I need to make changes to this schedule.

Week 1 - Introduction to economics

- January 17 - Introduction and the Economic Way of Thinking

Week 2 - Basic economic principles

- January 22 - Basic Economic Principles - Rational Choice and Incentives
 - Applied Mainline Economics, “Chapter 2: The Core Themes of Mainline Economics” by Matthew Mitchell and Peter Boettke (pgs. 20-28)
 - ChatGPT-generated summary of “De Gustibus Non Est Disputandum” by George Stigler and Gary Becker
<https://tinyurl.com/nhdus8hr>
 - Optional: “Incentives Matter” By Russell Roberts
<https://www.econlib.org/library/Columns/y2006/Robertsincentives.html>

- January 24 - Basic Economic Principles - Market Process and Institutions
 - I, Pencil: The Movie (6:32)
<https://www.youtube.com/watch?v=IY03t0qDISE>
 - I, Pencil Extended Commentary: Spontaneous Order (4:03)
<https://www.youtube.com/watch?v=yFeGNX06Zmk>
 - Applied Mainline Economics, “Chapter 3: Market Process Economics” by Matthew Mitchell and Peter Boettke (pg. 32-42)
 - Applied Mainline Economics, “Chapter 4: Institutions and Culture” by Matthew Mitchell and Peter Boettke (pg. 50 – 64)

Week 3 - Basic economic principles

- January 29 - Supply and Demand
 - “The Demand Curve,” Marginal Revolution University video (3:30)
<https://tinyurl.com/3882n2e8>
 - “The Supply Curve,” Marginal Revolution University video (2:54)
<https://tinyurl.com/2xeemett>
 - “Law of Demand,” Khan Academy (8:16)
<https://www.youtube.com/watch?v=ShzPtU7I0Xs>
 - “Law of Supply,” Khan Academy (8:24)
<https://www.youtube.com/watch?v=3xCzhdVtdMI>
 - “Change in supply versus change in quantity supplied,” Khan Academy (6:15)
<https://youtu.be/Nr1F8mMHfLE>
- January 31 - Supply and Demand (continued); Equilibrium
 - “Market equilibrium,” Khan Academy (10:17)
<https://youtu.be/PEMkfgrifDw>
 - “Changes in market equilibrium,” Khan Academy (9:05)
https://youtu.be/NgPqyM3I_8o
 - “Changes in equilibrium price and quantity when supply and demand change ,” Khan Academy (6:16)
<https://youtu.be/kl4n-EWwPyA>

Week 4 - Basic economic principles

- February 5 - Knowledge, Prices, Intervention
 - “Big Government Cheese” (20 minutes)
<https://www.npr.org/2021/05/21/999144678/big-government-cheese-classic>
 - “Hayek on the Use of Knowledge in Society” – Marginal Revolution University Video (5:08)
https://www.youtube.com/watch?v=-gi2_1Vsmf4
 - “Unintended Consequences” By Rob Norton
<https://www.econlib.org/library/Enc/UnintendedConsequences.html>
 - “Price Ceilings: The US Economy Flounders in the 1970s” Marginal Revolution University video (3:49)
<https://www.youtube.com/watch?v=sq1zIj8s8R0>
 - Optional: “What is Seen and What is Not Seen”
<https://tinyurl.com/ytv8dja9>

- February 7 - Opportunity Cost, Property Rights, Coase Theorem
 - “Marginalism” By Steven E. Rhoads
<https://www.econlib.org/library/Enc/Marginalism.html>
 - “Opportunity Costs: The Broken Window”
<https://www.youtube.com/watch?v=HR2mxZX1B9w>
 - Boettke, Peter J. and Candela, Rosolino, Development and Property Rights (August 9, 2014). In Alain Marciano and Giovanni Battista Ramello, eds. Encyclopedia on Law and Economics. Springer, 2014. (9 pages)
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2478167
 - “The Coase Theorem.”
<https://www.youtube.com/watch?v=00HPak2RL1Q>
 - Optional: “The Role of Property Rights As An Institution: Implications for Development Policy” by Karol Boudreaux
<https://www.mercatus.org/system/files/Property%20Rights.pdf>

Week 5 - Market failures and environmental problems

- February 12 - Market failures
 - “The economics of pollution” Khan Academy
<https://tinyurl.com/3tcwpnu8>
- February 14 - What are environmental problems? What is sustainability?
 - Free Market Environmentalism (FME) Chapter 1
 - “Sustainability: An Economist’s Perspective” by Robert Solow
<https://tinyurl.com/2rsu77jt>
 - Find a recent news article about an environmental issue. Be prepared to share a general synopsis of what the issue is and who is involved. We will discuss in class how the issue relates to some of the topics we have discussed.

Week 6 - Potential solutions; Which solution is best? (it depends!)

- February 19 - Public and private solutions
 - “Command-and-control regulation” Khan Academy
<https://tinyurl.com/yck69z66>
 - “What are market-oriented environmental tools?” Khan Academy
<https://tinyurl.com/3sa7w9sf>
 - “Types of market-oriented environmental tools” Khan Academy
<https://tinyurl.com/2p94s7t9>
- February 21 - Private and Public Sphere; Public Choice Economics
 - Applied Mainline Economics, “Chapter 5 The Political Process” by Matthew Mitchell and Peter Boettke (pg. 70-79)
https://ppe.mercatus.org/system/files/appliedmainline_fulltext.pdf
 - “Waste Land” NPR Planet Money Podcast (24 minutes)
<https://www.npr.org/2020/09/11/912150085/waste-land>
 - Virginia School of Political Economy I: An Introduction to Public Choice.” (8:16)
https://www.youtube.com/watch?time_continue=54&v=4XsR82AUBIc

Week 7 - What are environmental problems?

- February 26 - Environmental Economics
 - “Terry Anderson on the Environment and Property Rights,” EconTalk podcast, (about an hour)
<https://tinyurl.com/ykvv97ns>
- February 28 - Midterm Exam Review

Week 8 - SPRING BREAK

Week 9 - Midterm

- March 11
 - MIDTERM EXAM
- March 13 - Ecology and Society are Dynamic
 - FME Chapter 2

Week 10 - The zoo economy and who owns the environment?

- March 18 - The Zoo Economy
 - NPR Planet Money “The Zoo Economy” (17 min)
<https://www.npr.org/transcripts/493295430>
 - Saving African Rhinos: A Market Success Story
<https://tinyurl.com/4chc5xf5>
 - Optional: Private Property Rights to Wildlife: The Southern African Experiment
<https://tinyurl.com/sn3vztyr>
- March 20 - Who Owns the Environment?
 - FME Chapter 3

Week 11 - Public lands, public problems

- March 25 - This Land is Whose Land?
 - FME Chapter 4
- March 27
 - “Is Yellowstone National Park In Danger Of Being ‘Loved To Death’?” NPR from April 18, 2016
<https://tinyurl.com/yxw8skz2>
 - 1st Current Event Paper Due. Submit on Blackboard by 12.00 pm.

Week 12 - What to do about energy?

- April 1 - Prospecting for Energy and the Environment
 - FME Chapter 5
- April 3
 - “Regulating Monopolies: A History of Electricity Regulation” by Lynne Kiesling in conjunction with Learn Liberty
<https://tinyurl.com/3z92u9v2>

Week 13 - Water scarcity and water markets

- April 8
 - FME Chapter 6
 - “David Zetland on Water,” EconTalk podcast
<http://www.econtalk.org/david-zetland-on-water/>
- April 10
 - FME Chapter 7
 - “The Tragedy of the Commons” - Marginal Revolution University video
<https://www.youtube.com/watch?v=bs2P0wRod8U>

Week 14 - Sustainable Investment; Communities; Entrepreneurship

- April 15 - ESG Investing
 - “Are E.S.G. Investors Actually Helping the Environment?” Freakonomics Radio (59:32)
<https://tinyurl.com/53m3824r>
 - “Counterproductive Sustainable Investing: The impact elasticity of brown and green firms” by Samuel Hartzmark and Kelly Shue
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4359282
- April 17 - Communities & Entrepreneurship
 - FME Chapter 8
 - “Bloomington School of Political Economy III: The Continuing Relevance of Institutional Analysis,” Mercatus Center at George Mason University
https://www.youtube.com/watch?time_continue=557&v=TTK1bAI07MQ
 - FME Chapter 9
 - “Your Next High-End Safari Destination: The Plains of Montana,” Brad Wieners. Bloomberg
<https://www.bloomberg.com/features/2016-american-prairie-reserve/>
 - 2nd Current Event Paper Due. Submit on Blackboard by 12:00 pm.

Week 15 - Climate change

- April 22
 - FME Chapter 10
 - The Critical Role of Markets in Climate Change Adaptation
<https://tinyurl.com/3ydu4yap>
- April 24 - Final Presentations

Week 16

- April 29 - Final presentations
- May 1 - Reading day; no class

Week 17 - Final papers

- May 6
 - Final papers due by 12:00 pm via email

Office Hours

Office hours will be held in person from 10:30-11:30 am before each Wednesday lecture and online from 9:30-10:30 am before each Monday lecture. My office is located in Buchanan Hall, suite D150 (the Department of Economics). The Zoom link for online office hours is [here](#). If the time slot for my scheduled office hours does not work for you, we can set up a time to meet via Zoom. The best times for setting up a Zoom meeting are Monday-Thursday mornings from 8:00-11:00 am.

Communication Policy

You must use your Mason email account for all University communications. I will not respond to emails from non-Mason email addresses. I will do my best to respond to all emails within 24 hours. If you email me over the weekend, I will respond by the following Monday. If I do not respond within this time frame, please send me a reminder email.

Electronic Devices

You may not use a phone, laptop, or any other electronic device during class for anything not related to class. Laptops and tablets are permitted during class for note-taking or accessing class materials but they must remain flat on the desk/table in front of you at all times. Use of electronic devices for other purposes is prohibited and may negatively affect your participation grade. You may record my lectures, unless any other student objects to this.

Honor Code

The George Mason University Honor Code is as follows:

To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University Community and with the desire for greater academic and personal achievement, we, the student members of the university community, have set for this Honor Code: Student Members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.

I expect each of you to abide by this code. Any student suspected of any violation will be reported to the Office of Academic Integrity.

Learning Objectives

This course is a Mason Core course in the social and behavioral sciences category. Upon completion of this course, students will be able to:

1. Explain how individuals, groups, or institutions are influenced by contextual factors.
2. Demonstrate awareness of changes in social and cultural constructs.
3. Use appropriate methods and resources to apply social and behavioral science concepts, terminology, principles, and theories in the analysis of significant human issues, past or present.

Disability Accommodation

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 <http://ds.gmu.edu/> for detailed information about the Disability Services registration process. Please discuss your approved accommodations with me, and I will implement them. Disability Services is located in Student Union Building I (SUB I), Suite 2500. Email:ods@gmu.edu Phone: (703) 993-2474.