

ECON 335-01
Environmental Economics
George Mason University
Fall 2019

Instructor: Deric Tilson

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Office Hours: Wednesdays 4:30-6:30 or by appointment at Buchanan Hall D150

Time: Mondays, 7:20pm-10:00pm

Location: Robinson B208

Important Dates:

- Paper #1 October 7
- Midterm Exam October 15
- Paper #2 November 25
- Final Exam December 16

Course Description:

This course in environmental economics is designed to prepare students to be able to use economic methods as a tool for environmental policy analysis. The course will be divided into two parts. This first part of the course will cover the primary microeconomic concepts and models that are used in environmental economics. This includes static and dynamic efficiency, welfare analysis, positive and negative externalities, and environmental valuation methods. The second part of the course will cover topics of importance to environmental economics such as water use, resource extraction, climate change, and energy. The economic models covered in the first part of the course will be combined with historical context and concepts from political ecology to evaluate specific current and past policies affecting the environment. Systems dynamics and sustainable development will be major themes throughout this course. This course may be supplemented with additional readings that will be posted on blackboard.

Required Text: *Environmental and Natural Resource Economics* Harris and Roach (2018)

Required Other: iClicker (physical remote or phone app)

- The App requires a small fee for usage, but is cheaper than the remote
- App Store: <https://apps.apple.com/us/app/iclicker-reef/id899690067>
- Google Play: https://play.google.com/store/apps/details?id=com.mnv.reef&hl=en_US

Recommended Reading: *Thinking in Systems* Donella Meadows (A Primer on Systems Theory)

Grade Allocation:

- Attendance/Participation: 10%
- Quizzes: 15%
- Midterm: 20%
- Papers: 25% (Two papers at 12.5% each)
- Final: 30%

Attendance: Short pop quizzes will be given throughout the semester. The quizzes are intended to be very easy and the questions will be pulled directly from the reading. The quizzes will be given on randomly during the lecture and you will have to be in attendance to receive credit for the quiz. The iClicker app or remote will be used to take both attendance and for completion of the quizzes. In addition, the exams will include material that is discussed in class but is not in the textbook so attendance is suggested for optimal exam performance.

Electronic Devices: You may use a laptop or tablet for class related purposes. I understand that many people need to have their phones accessible throughout the day. If you need to use your phone please do so outside of the classroom. The exception for this is use of the iClicker app for attendance and quizzes.

Honor Code: Students are expected to understand and adhere to the honor code of George Mason University. Students may neither give nor receive help from other students or from other sources during exams or quizzes. Students are obligated to report any violations observed.

Disability Policy: If you are a student with a disability and you need academic accommodations, please see me and contact the Office of Disability Services at 703-933-2474. All academic accommodations must be arranged through that office

Papers: There are two (2) short paper assignments due during the course of the semester. Each paper should take what you have learned in class and apply economic theory on to real world environmental and ecological situations, outcomes, or policies. Your paper should be more analytical and less normative. The papers should be no less than 1,000 words each. The papers should be sent via email no later than the start of class on the due date. Late papers will not be accepted.

Tentative Course Outline and Readings:

Date	Topic	Textbook Reading
Week 1, August 26	Syllabus, Introduction and Overview of Economics	Harris and Roach: Chapter 1
Labor Day, September 2	No Class	
Week 2, September 9	Property Rights and Externalities	Harris and Roach: Chapter 3
Week 3, September 16	Common Pool Resources	Harris and Roach: Chapter 4
Week 4, September 23	Dynamic Equilibrium	Harris and Roach: Chapter 5
Week 5, September 30	Ecosystem Valuation	Harris and Roach: Chapter 6
Week 6, October 7	Cost Benefit Analysis	Harris and Roach: Chapter 7

Paper #1 Due		
Week 7, October 15 (Tuesday)	Midterm	Study!!!
Week 8, October 21	Pollution	Harris and Roach Pollution Chapter 8
Week 9, October 28	Ecological Economics	Harris and Roach Chapter 9
Week 10, November 4	Climate Change and Energy	Harris and Roach Chapters 11 & 12
Week 11, November 11	Populations	Harris and Roach Chapter 13
Week 12, November 18	Forestry and Water	Harris and Roach Chapters 19 & 20
Paper #2 Due		
Week 13, November 25	Sustainable Development	Harris and Roach Chapter 22
Week 14, December 2	Tentative/Make up: Trade Theory or Other Applications and Review	TBA
December 9-10	Reading days	
Monday December 16 7:30pm-10:15pm	Final Exam (Make sure to check the official schedule prior to exam week in the event of changes.)	Study!!!