# The Economics of Environmental Policy EVPP 338

3 credits

**Spring Semester, 2023** 



Source: The Economist.

**INSTRUCTOR:** Diego Valderrama.

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**CLASSROOM:** Innovation Hall 323.

**CLASS MEETINGS:** Tuesdays and Thursdays, 10:30 to 11:45 AM.

**OFFICE HOURS:** By appointment.

## **COURSE DESCRIPTION:**

This course is designed to introduce non-economists to the economics of the environment and natural resource use. We will discuss a variety of topics including sustainability standards, the benefits and costs of environmental protection, public goods, natural resource management, the government's role in environmental policy, methods for promoting clean technology, non-market valuation, incentive-based regulation, global pollution and resource issues, environmental justice and ethics, and more. Topics will be presented in the context of specific applications, policies and case studies.

#### **TEXTBOOK**:

Economics and the Environment, Ninth Edition. 2020. Eban Goodstein (Bard College) and Stephen Polasky (University of Minnesota). Wiley, Hoboken, NJ.

## **RECOMMENDED PREREQUISITES:**

Either ECON 100/103/105/110 or MATH 105/106/108/111/113. Normally, basic algebra skills will suffice for the class.

# **COURSE GRADING**:

Grades in this course will be determined by the results of three lecture exams and class attendance/participation as measured by quizzes delivered through the Poll Everywhere application. Weighting of these activities will be as follows:

Exam 1	25%
Exam 2	25%
Exam 3	25%
Average score of quizzes*	10%
Attendance as measured by quizzes	<u>15%</u>
TOTAL	100%

<sup>\*</sup> If the average score of quizzes is lower than the average grade of exams, quiz scores will be disregarded. In other words, quiz scores will not lower the overall course grade, regardless of performance. However, not taking the quizzes (because of unexcused absences, for example) will negatively affect the student's grade.

Final scores in the course will be calculated based on the percentage grade earned on each of the course activities listed above, multiplied by the weighting listed for each activity. Letter grades will be assigned based on the final course scores as follows:

- A+=97-100%
- A = 93 96.99%
- A = 90 92.99%
- B+=87-89.99%
- B = 83 86.99%
- B = 80 82.99%
- C+=77-79.99%
- C = 73 76.99%
- C = 70 72.99%
- D = 60 69.99%
- F = 0 59.99%

PLEASE NOTE THAT I DO NOT ROUND UP. FOR EXAMPLE, AN 89.99 IS A B+ AND IT WILL NOT BE ROUNDED UP TO AN A-.

Proposed dates for the in-class exams are indicated in the class schedule section of this syllabus. Any changes to these proposed dates will be announced in class at least one week in advance.

# Notice Regarding the Poll Everywhere System:

Poll Everywhere is a web-based student response system. Student e-mails will be registered by the instructor prior to the first day of classes (students can confirm their registration by logging in at <a href="https://www.polleverywhere.com/login">https://www.polleverywhere.com/login</a> with their Mason credentials). Normally at a random moment during each class period, the instructor will display a Poll Everywhere quiz on-screen and students will provide their responses through their phone apps or by logging in at the web address pollev.com/dvalder using their laptops or tablets. Results will appear live on the screen for the class to discuss. Students are strongly advised to download the phone apps for quick, regular access to Poll Everywhere.

<u>ACADEMIC INTEGRITY</u>: GMU students, faculty and staff are bound by the GMU Honor Code. Adherence to the GMU Honor Code is expected of all students, specifically:

Members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.

In all assignments and communications, plagiarism will not be tolerated. This applies equally to oral and written communications in the context of any evaluated (graded) course assignments. As stated in the Honor Code, infractions may result in invalidated credit for dishonorable work and lowered grade, including failure from the class, suspension or dismissal. Inquiries for clarification from the professor are welcome. For more information see the complete Honor Code in the university catalog.

<u>DISABILITY ACCOMMODATIONS</u>: Disability Services at George Mason University is committed to upholding the letter and spirit of the laws that ensure equal treatment of people with disabilities. Under the administration of University Life, Disability Services implements and coordinates reasonable accommodations and disability-related services that afford equal access to university programs and activities. Students can begin the registration process with Disability Services at any time during their enrollment at George Mason University. If you are seeking accommodations, please visit <a href="http://ds.gmu.edu/">http://ds.gmu.edu/</a> for detailed information about the Disability Services registration process. Disability Services is located in Student Union Building I (SUB I), Suite 2500. Email: <a href="https://ds.gmu.edu/">ods@gmu.edu/</a> | Phone: (703) 993-2474.

<u>DIGITAL COMMUNICATION</u>: Students must use their MasonLive email account to receive important University information, including communications related to this class. I will not respond to messages sent from or send messages to a non-Mason email address.

<u>DIVERSITY STATEMENT</u>: George Mason University promotes a living and learning environment for outstanding growth and productivity among its students, faculty and staff. Through its curriculum, programs, policies, procedures, services and resources, Mason strives to maintain a quality environment for work, study and personal growth. An emphasis upon diversity and inclusion throughout the campus community is essential to achieve these goals. Diversity is broadly defined to include such characteristics as, but not limited to, race, ethnicity, gender, religion, age, disability, and sexual orientation. Diversity also entails different viewpoints, philosophies, and perspectives. Attention to these aspects of diversity will help promote a culture of inclusion and belonging, and an environment where diverse opinions, backgrounds and practices have the opportunity to be voiced, heard and respected.

#### NOTICE OF MANDATORY REPORTING OF SEXUAL OR INTERPERSONAL MISCONDUCT:

As a faculty member, I am designated as a "Non-Confidential Employee," and must report all disclosures of sexual assault, sexual harassment, interpersonal violence, stalking, sexual exploitation, complicity, and retaliation to Mason's Title IX Coordinator per University Policy 1202. If you wish to speak with someone confidentially, please contact one of Mason's confidential resources, such as Student Support and Advocacy Center (SSAC) at 703-993-3686 or Counseling and Psychological Services (CAPS) at 703-993-2380. You may also seek assistance or support measures from Mason's Title IX Coordinator by calling 703-993-8730, or emailing <a href="mailto:titleix@gmu.edu">titleix@gmu.edu</a>.

<u>TENTATIVE CLASS SCHEDULE</u>: Subject to changes.

Wast	eek Date Topic	m ·	Textbook	
week		Part	Chapter	
1	1/24	Course overview, Four Economic Questions about Climate Change	Intro	1
	1/26	Ethics and Economics	I	2
2	1/31	Pollution and Resource Degradation as Externalities	I	3
	2/2	Problem Session – Chapter 3	I	3
3	2/7	The Efficiency Standard	I	4
	2/9	Problem Session – Chapter 4	I	4
4	2/14, 2/16	Measuring the Benefits of Environmental Protection	I	5
5	2/21	Problem Session – Chapter 5	I	5
	2/23	EXAM 1		
6	2/28, 3/2	Measuring the Costs of Environmental Protection	I	6
7	3/7	The Safety Standard	I	7
	3/9	The Sustainability Standard	I	8
8	3/14, 3/16	SPRING BREAK (NO CLASSES)		
0	3/21	Problem Session – Chapter 8	I	8
9	3/23	Measuring Sustainability	I	9
10	3/28, 3/30	Natural Resources and Ecosystem Services	I	10
11	4/4	Problem Session – Chapter 10	I	10
	4/6	EXAM 2		
12	4/11	Is More Really Better? Consumption, Welfare, and Behavior	I	11
	4/13	The Political Economy of Environmental Regulation	II	12
13	4/18	Incentive-Based Regulation: Theory	III	15
	4/20	Incentive-Based Regulation: Theory (Continued)	III	15
1.4	4/25	Problem Session – Chapter 15	III	15
14	4/27	Incentive-Based Regulation: Practice	III	16
15	5/2	Incentive-Based Regulation: Practice (Continued)	III	16
	5/4	Promoting Clean Technology: Theory	III	17
16	5/16	FINAL EXAM, 10:30 AM – 1:15 PM!		

Part I: How Much Pollution is Too Much Pollution?

Part II: Is Government Up to the Job? Part III: How Can We Do Better?