# Introduction to Environmental and Resource Economics EVPP 524, Fall 2021

Place and time: Van Metre Hall 465 (Arlington), Tuesdays 7:20-10:00 pm

**Instructor:** Chris Kennedy, ckenned7@gmu.edu

Course website: Blackboard: log in at https://mymasonportal.gmu.edu

**Office hours:** Virtually by appointment.

### **COVID-19 Adjustments**

I plan to offer this course in person so long as it is safe to do so. In the event we are directed to move to virtual learning, I will offer the course in a synchronous format via Blackboard Collaborate. I may offer this feature regardless if there are other contingencies, such as a student under mandatory isolation because of COVID-19 exposure, for instance. My goal is to be flexible. Please do not hesitate to contact me with questions.

#### **Course description**

This course is designed to introduce non-economics graduate students to the field of environmental and natural resource economics. There are three objectives. First, by the end of the course you will have a good understanding of the basic assumptions of microeconomics theory, including criticisms. Second, you will have developed a working knowledge of current applications of economic theory to key environmental policy challenges. Finally, you will be able to perform basic analysis of environmental problems from the perspective of economics. Weekly course meetings consist of lectures and discussion. Participation is expected and requires completion of readings. While some course material is contained in the optional textbook, any mandatory or additional readings will be provided by me. Graded material consists of writing assignments, exams, seminar attendance and report, and, depending on attendance, short quizzes.

#### **Textbook**

**Recommended but not required**: Hanley, Nick and Edward B Barbier. *Pricing Nature: Cost-Benefit Analysis and Environmental Policy*. Edward Elgar. ISBN: 978-1-84844-470-6

## **Grading**

Readings and participation: 10%
Seminar attendance / write-up: 15%
HW #1 – Economics paper review: 10%
HW #2 – Non-econ paper review: 10%
HW #3 – "Fact check" memo: 15%
Midterm exam: 20%
Final exam: 20%

Letter grade categories (no rounding): A+ 98-100; A 93-97; A- 90-92; B+ 88-89; B 83-87; B- 80-82; C 70-79; D 65-69; F <65.

### **Grading category details**

**Participation** includes regular attendance and active participation. You are expected to read assigned readings and constructively contribute to class discussions. You are expected to **attend** 

an applied economics seminar focused on an environmental policy issue and submit a writeup. More details will be provided via Blackboard. The two paper reviews are designed to give
you some experience analyzing technical research documents. These papers will be chosen by
you but approved by me no later than one week before the assignments are due. They must be
published in peer-reviewed academic journals with current ISI impact factor ratings, and they
must be primarily empirical studies (using statistical methodologies to analyze real-world data).
The "fact check" memo consists of an analysis of a statement from an elected official or Federal
or State agency leader/spokesperson regarding the economic impacts of an environmental policy
proposal. This includes both new policies or proposals to change or eliminate existing policies.
The midterm and final exams will be take-home and consist of questions based on topics
and methods discussed in class. Additional details will be provided as the exam date nears.

### **COVID-19 Guidelines for In-Person Class Attendance**

All students taking courses with a face-to-face component are required to take Safe Return to Campus Training prior to visiting campus. Students are required to follow the university's public health and safety precautions and procedures outlined on the university <a href="Safe Return to Campus webpage">Safe Return to Campus webpage</a>. All students in face to face and hybrid courses must also complete the Mason COVID Health Check daily, seven days a week. The COVID Health Check system uses a color code system. Only students who receive a "green" notification are permitted to attend courses with a face-to-face component. Faculty may ask you to see a Green email.

# **Disability 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 <a href="http://ds.gmu.edu/">http://ds.gmu.edu/</a> 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: <a href="https://ds.gmu.edu/">ods@gmu.edu/</a> Phone: (703) 993-2474

# **Academic integrity**

I expect each student to submit his or her own work and provide attribution for sources used. Please make yourself familiar with the GMU Honor Code: <a href="http://oai.gmu.edu/mason-honor-code/">http://oai.gmu.edu/mason-honor-code/</a>. If you have questions or concerns regarding your work or the work of others, please see me. Remember: rewriting what others have already written is plagiarism. From the honor code: "[Plagiarism includes:] Borrowing the sequence of ideas, the arrangement of material, or the pattern of thought of someone else without proper acknowledgment."

#### **Diversity**

George Mason University celebrates a strong commitment to diversity and inclusion. Please see the Mason Diversity statement. Ideas are not sacred, but I expect students to engage with others in a respectful manner and refrain from personal attacks. All of you should be comfortable expressing your individual views. I will quote from Clark Kerr in 1961, former president of the University of California: "The University is not engaged in making ideas safe for students. It is engaged in making students safe for ideas. Thus it permits the freest expression of views before students, trusting to their good sense in passing judgment on these views. Only in this way can it best serve American democracy." For a more detailed take, please see the Chicago Principles.

<u>Course schedule</u> Please check Blackboard frequently for additional material. Assigned readings will be posted.

Week	Dates	Topic	Due
1	8/24*	Introductions. Overview of economics; markets and market failures; role of economics and economists in environmental policy	_
2	8/31*	Foundations of cost-benefit analysis, microeconomic theory and criticisms	Readings: CBA; HB 1,2
3	9/7*	Non-market valuation: stated preference	Readings: Valuation – Stated Preference; HB 3
4	9/14	Non-market valuation: revealed preference	Readings: Valuation – Revealed Preference; HB 4,5
5	9/21	Value of risk reductions / VSL	Readings: VSL; HB 6 HW #1 approval due
6	9/28	Discounting, TEV	Readings: Discounting, SCC/TEV; HB 7,13
7	10/5	Natural resource economics: non-renewable resources, forests, fisheries	Readings: NRE-1 HW #1 due 7:20 pm
8	10/12	No class (fall break)	
9	10/19	Natural resource economics: property rights and managing the commons	Readings: NRE-2 Midterm exam posted
10	10/26	Market-based solutions for common-pool resources	Posted readings Midterm Due HW #2 approval due
11	11/2	Pollution control economics: direct regulation vs. market-based solutions	Readings: Pollution-1
12	11/9	Pollution control economics: other issues	Readings: Pollution-2 HW #2 due 7:20 pm HW #3 approval due
13	11/16	Environmental federalism, non-pecuniary approaches to conservation	Readings: Federalism <b>HW #3 due 7:20 pm</b>
14	11/23	Conflict, economics, and the environment	Readings: Conflict
15	11/30	TBD (last day of class)	TBD, Final exam posted
15	12/7^	Complete and submit final exam	Final exam due 11:59 pm

Readings correspond to folders on Blackboard and Hanley and Barbier (HB) chapters \*Indicates in person meeting. Others TBD.

<sup>^</sup>Indicates tentative date for final.