University of Virginia Department of Economics

Econ 4430: Environmental Economics

Spring 2023

<u>Contact Information</u>: **Professor Sheetal Sekhri** Email: <u>ssekhri@virginia.edu</u> **Teaching Assistant**

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Office Hours: Tuesday- 12:45 to 1:45 pm (or by appointment)

Ben's Office hours: Thursday from 10:30-11:30am

Course Details:

Meeting time and place:

TTh 3:30 to 4:45 in Chemical Engineering Building 5

(enroll in 1 out of 2 sections)

Course Objectives:

We shall require a substantially new manner of thinking if mankind is to survive. ~Albert Einstein

Through a series of lectures, and discussions this course aims to facilitate the student's ability to think about environmental problems from an economic perspective. It will train the students to identify sources of market failure giving rise to inefficient allocation of environmental quality; analyze market based and regulatory approaches to address environmental problems; assess the benefits and costs of pollution control; and be able to participate with sound arguments in many contentious debates on issues ranging from climate control to waste management.

Prerequisite:

Sheetal Sekhri

Econ 3010 or 3110 (Knowledge of microeconomic concepts taught in a course equivalent to Intermediate Microeconomics is a must to do well in this class)

Text:

Textbook: I will draw from many materials and there is no required textbook

Markets and the Environment, 2nd Ed (Nathaniel O. Keohane and Sheila M. Olmstead)

I will also provide you with a list of articles or other readings that compliment the material being covered. Lectures will cover additional material that is not presented in the text book.

References (Consult me for more details. You are not required to get these):

- Charles D. Kolstad, <u>Environmental Economics</u> good technical book for advanced treatment of topics.
- Paul Portney and Robert Stavins, <u>Public Policies for Environmental Protection (2nd Edition)</u> summarizes current policy debates in US (strongly recommended if you are interested in public policies related to environmental issues in US)
- Barry C. Field and Martha K. Field, <u>Environmental Economics: an introduction</u> an excellent book to gain intuition

Assessment and Grading:

Your assessment will be based on five problems sets, two midterm exams, one final quiz, 1 group presentation, discussions, and class participation. Each of these contributes to your grade as follows:

10% Problem Sets 5

50 % Midterm Exams

20 % group Presentations

15 % Final Quiz

5% Recitation and Class Participation

Course Policies:

Refer to university policies on Plagiarism and code of conduct.

The honor code will be strictly enforced. Your exams and Research Writing Assignment must be pledged. Your problem sets should state that you have not copied them.

Class Attendance:

- You are strongly encouraged to attend class and recitation section.
- Recitation attendance is compulsory on scheduled discussion days.
- Out of courtesy to others, please do not use cell phones in class and do not plan on eating your meals during lecture.
- You will be responsible for any announcements made in class or on the class website.

Recitations:

The weekly meetings supervised by the TA will be used to answer questions about problem sets, and exams. These will also be the forum for discussions in the second half of the semester.

Discussions:

- We will have 1 scheduled case study discussion during recitation on current debates about pressing environmental problems. Active participation in this is expected.
- The TA will discuss the rubric and the format during the recitations.
- You are encouraged to make suggestions about the topics.

Problem Sets:

- There will be 5 problem sets assigned during the semester.
- You can work in groups to discuss your problem sets but you must turn in your own answers.

- Please turn in solutions to the problem sets during recitation on assigned due dates. <u>Late problem sets will not be accepted. In case of sickness or other emergencies, please</u> <u>talk to me in class about a late assignment.</u>
- The problem sets will be graded to assess your effort in solving them (0-2 scale). Show all your work to get credit. You will be responsible for checking the answer keys and ensuring the correctness of your solutions.

Exams:

- The midterms will be held in class and are closed book, closed notes format. Final exam will comprise a quiz to evaluate your grasp of the overarching themes covered.
- The exams will include material presented in class, and covered in problem sets, discussions, and assigned readings.
- Computers, PDAs, cell phones etc cannot be used during an exam. You can use a basic calculator (not a programmable one).
- <u>There will be no make- up exams</u>. However, if you have to miss an exam under extenuating circumstances, inform me as soon as you can (before the exam) along with documents supporting your reason. Your other exam will be re-weighed in such an event. The reweighing will be mean adjusted for that specific exam.
- For special needs (including extra time for exams), please furnish a letter from <u>Learning</u> <u>Needs and Evaluation Center</u> by February 6. I will not entertain any requests on the day of the exam.

You will not be allowed to use cell phones as calculators or for checking time during the exam.

Class Participation:

- You can earn participation points by asking or answering questions in class and in recitation. Meaningful comments on news articles on environmental issues will also count.
- Too many absences or disruptive behavior (example sleeping in class) can result in deduction of points.

Important Dates:

Midterms: **16th Feb and 23rd March** Final Quiz: **As scheduled by the registrar, Thursday May 11, 9 am to 12 pm**

No additional assignments will be available to students to make up for their grades.

Assignment	Date Assigned	Due Date
PS1	1/24	2/3
PS2	1/31	2/10
Midterm	2/16	In-class
PS3	2/23	3/3
PS4	3/2	3/17
Midterm	3/23	In-class
PS5	4/6	4/14

All dates except the exams are subject to change

Approval of Presentation Topic – March 14