Environmental Economics Economics 3545 Spring 2021

Instructor: Kevin Starnes (kevin.w.starnes@colorado.edu)

Class Meeting: MWF 4:10-5:00, Online

Office Hours: Tuesday 12:00-2:00 PM and Friday 1:30-3:30 PM

Zoom: https://cuboulder.zoom.us/my/kevin.starnes

Website: Canvas

Course Description

This course in environmental economics will introduce students to the relationship between the economic system and environmental systems. Whereas natural resource economics focuses on flows from the environment to the economic system, environmental economics focuses on flows from the economic system to the environment. One classic example of these flows would be air pollution. This class builds upon basic microeconomic thought to analyze environmental impacts. Students will learn the tools to consider market failures and the important question of whether or not market interventions are justified on economic grounds. This course will also address institutions and policy issues related to climate change, ecosystem services, and renewable energy.

Required Materials:

Environmental Economics and Management: Theory, Policy, and Applications, by Scott Callan and Janet Thomas.

This textbook is available through Cengage for access, or from Cengage unlimited if you are required to have Cengage textbooks for multiple classes.

Grade Breakdown:

Grade Item	Percentage
Homework Assignments	20%
Participation Quizzes	15%
Midterm 1	20%
Midterm 2	20%
Final	25%

<u>Final:</u> The final exam will take place on **Wednesday May 5th proctored online**. The final exam is mandatory.

As is university policy, you can reschedule your final exam only if you have three or more exams scheduled for the same day. If this is the case, you may have your exams rescheduled except for the first two exams scheduled for of that day. However, you must request accommodations for this before the 10th week of classes.

Midterms:

Each midterm will count for 20% of your final grade. The first midterm is tentatively scheduled for Feb 26th. These exams will include a mix of multiple choice and short answer questions. More details on each format will be given leading up to each exam.

Participation Quizzes:

Research has shown that students who regularly attend courses perform better on exams. While we are in an online learning environment, I have continued to see higher grades from more engaged students. Therefore, I am strongly encouraging regular attendance and participation through zoom quizzes that will be given each lecture. These quizzes will account for 15% of your final grade.

To remain in the course, you must be present for 2 out of the first 3 days of class. Otherwise, you risk being administratively dropped to make room for students on the waiting list. If you are not able to make this attendance for some reason, contact me as soon as possible.

Homework Assignments:

There will generally be weekly homework assignments what will make up 20% of your grade. These homework assignments will be assigned through canvas and due by Sunday at 11:59 PM. There fill be no homework due the first Sunday of class (Jan 17th). These homework assignments will be a mix of mathematical problems, answering conceptual questions, and occasional discussion questions.

Grading scale:

Grade	Percentage	Grade	Percentage
Α	93-100	С	73-76
A-	90-92	C-	70-72
B+	87-89	D+	67-69
В	83-86	D	63-66
B-	80-82	D-	60-62
C+	77-79	F	0-59

I will curve final grades so that the class average is around a B-.

The final course grades will be rounded using a ceiling function to the next highest percentile. So if your final class percentage is 82.01%, it will be bumped to 83%, while 82.00% will stay at 82%.

Office Hours:

For office hours I will be available during my regularly scheduled office time through Zoom. Tuesday 12:00-2:00 PM and Friday 1:30-3:30 PM. Again, my zoom room is https://cuboulder.zoom.us/my/kevin.starnes

Course Outline

Module 1: MODELING ENVIRONMENTAL PROBLEMS

- Microeconomics review
- Classic Market Model
- Market Failure

Module 2: MODELING SOLUTIONS TO ENVIRONMENTAL PROBLEMS

- -Command and Control
- Market based approaches

Module 3- ANALYTICAL TOOLS FOR ENVIRONMENTAL PLANNING

- -Environmental Risk
- -Cost Benefit Analysis

Selections from the remaining Modules of the Book focusing on specific policy interests:

- -Local Air quality
- -Climate Change

Class Policies

Makeups

There will be no makeup tests. If a test conflicts with a mandatory CU event or other excused absence, we can arrange to have you take it before the test day, but not after. Similarly, assignments are given well ahead of their due date, so late assignments will not receive credit.

Email Policy and Office Hours

Office hours are as posted and by appointment in a reasonable time in advance.

If you would like to contact me through email, please use your official school email address. I will not respond to personal email. Do not email me questions that can be found in the syllabus. Since there are many students in this class, please allow me 24 to respond to emails. If I have not responded within one day, please feel free to send me a follow-up email. Please start a new email when asking me a question rather than replying to a class-wide email. This makes sure I see all emails, and also makes sure nobody accidentally clicks the dreaded "reply all" button.

I will do my best to check email throughout the day. However, I will be making a point to try to check email at 12:00 and 6:00 each week day.

Cheating

Cheating will not be tolerated in this course. **If you are caught cheating I will assign you an F in the course**. I will then meet with the Associate Chair of Undergraduate Studies for the Economics Department, and we will report this to both the University and the Honor Council which could result in further discipline up to and including expulsion from the University.

CLASSROOM BEHAVIOR

Both students and faculty are responsible for maintaining an appropriate learning environment in all instructional settings, whether in person, remote or online. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. For more information, see the policies on classroom behavior and the Student Code of Conduct.

REQUIREMENTS FOR COVID-19

As a matter of public health and safety due to the pandemic, all members of the CU Boulder community and all visitors to campus must follow university, department and building requirements, and public health orders in place to reduce the risk of spreading infectious disease. Required safety measures at CU Boulder relevant to the classroom setting include:

- maintain 6-foot distancing when possible,
- wear a face covering in public indoor spaces and outdoors while on campus consistent with state and county health orders,
- clean local work area,
- practice hand hygiene,
- follow public health orders, and
- if sick and you live off campus, do not come onto campus (unless instructed by a CU Healthcare professional), or if you live on-campus, please alert <u>CU Boulder Medical Services</u>.

Students who fail to adhere to these requirements will be asked to leave class, and students who do not leave class when asked or who refuse to comply with these requirements will be referred to Student Conflict Resolution. For more information, see the policies on COVID-19 Health and Safety and classroom behavior and the Student Code of Conduct. If you require accommodation because a disability prevents you from fulfilling these safety measures, please see the "Accommodation for Disabilities" statement on this syllabus.

All students who are new to campus must complete the COVID-19 Student Health and Expectations Course. Before coming to campus each day, all students are required to complete the Buff Pass.

Students who have tested positive for COVID-19, have symptoms of COVID-19, or have had close contact with someone who has tested positive for or had symptoms of COVID-19 must stay home.

ACCOMMODATION FOR DISABILITIES

If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your faculty member in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the <u>Disability Services website</u>. Contact Disability Services at 303-492-8671 or dsinfo@colorado.edu for further assistance. If you have a temporary medical condition, see Temporary Medical Conditions on the Disability Services website.

Preferred Student Names and Pronouns

CU Boulder recognizes that students' legal information doesn't always align with how they identify. Students may update their preferred names and pronouns via the student portal; those preferred names and pronouns are listed on instructors' class rosters. In the absence of such updates, the name that appears on the class roster is the student's legal name.

HONOR CODE

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the Honor Code. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code (honor@colorado.edu); 303-492-5550). Students found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code as well as academic sanctions from the faculty member. Additional information regarding the Honor Code academic integrity policy can be found at the Honor Code Office website.

SEXUAL MISCONDUCT, DISCRIMINATION, HARASSMENT AND/OR RELATED RETALIATION

The University of Colorado Boulder (CU Boulder) is committed to fostering an inclusive and welcoming learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct (harassment, exploitation, and assault), intimate partner violence (dating or domestic violence), stalking, or protected-class discrimination or harassment by members of our community. Individuals who believe they have been subject to misconduct or retaliatory actions for reporting a concern should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127 or cureport@colorado.edu. Information about the OIEC, university policies, anonymous reporting, and the campus resources can be found on the OIEC website.

Please know that faculty and graduate instructors have a responsibility to inform OIEC when made aware of incidents of sexual misconduct, dating and domestic violence, stalking, discrimination, harassment and/or related retaliation, to ensure that individuals impacted receive information about options for reporting and support resources.

RELIGIOUS HOLIDAYS

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, please send me an email notifying me of class conflicts as soon as possible but no less than 2 weeks in advance. See the campus policy regarding religious observances for full details.

Additional Resources:

The Economics Department provides a free drop-in tutorial office which offers assistance on all core courses in the major, and occasionally on other undergraduate courses in the Department. Its website is https://www.colorado.edu/economics/node/513/attachment. (This resource is open to you, but this class is not strictly covered.)

The Economics Department maintains a list of tutors who are available for private hire. Its website is https://www.colorado.edu/economics/node/515/attachment.