

## COURSE INFORMATION

ECON 455 Section 1. Environmental Economic Theory. 3 Credits.  
Department of Economics  
Spring 2021  
Tuesday/Thursday 11:00 – 12:15pm, synchronous remote

## INSTRUCTION TEAM

Instructor: Paige Weber  
Office: Gardner 300-E  
Email: [paigeweber@unc.edu](mailto:paigeweber@unc.edu)  
Office Hours: Thursday 3:30 – 4:30pm, drop-in, waiting room enabled  
Zoom link: <https://unc.zoom.us/j/93172104941>

TA: SangYun Lee  
Email: [sangyun@live.unc.edu](mailto:sangyun@live.unc.edu)  
Office hours: Tuesday 9:30 – 10:30am  
Personal Meeting ID: 660 086 3665  
Passcode: econ

## COURSE MODE

This course will be offered synchronous remote via zoom. Attendance is highly encouraged. If students cannot attend for an emergency type of reason, I will record the lectures. I am not doing this routinely as I want to encourage class participation and class attendance.

I will open the zoom link 15 minutes before class. The purpose of this is to create opportunities for students to chat among each other. (However, I will be joining closer to class time).

Zoom link: <https://unc.zoom.us/j/96972353468?pwd=UXhBeDFQSzJ Rc0dvTHZxelFheiszZz09>  
Passcode: 948883

This is my first time teaching remotely, which means, I will mess up! Thanks advance for your patience as we navigate learning in a remote environment together.

## CATALOGUE DESCRIPTION

A rigorous economic analysis of environmental issues, with particular emphasis on the problem of designing appropriate institutions and regulations under private information and the interaction between economic and ecological systems. Topics include emission fees and marketable permits, pollution models, carbon regulation, and ecosystem service markets.

## TARGET AUDIENCE

The primary audience for this course is students majoring in Economics. Students will apply and extend their knowledge of microeconomic principles to environmental issues.

## COURSE PREREQUISITES

[ECON 400](#) and [410](#); a grade of C or better in [ECON 400](#) and [410](#) is required.

## COURSE GOALS

1. The primary goal is to apply economic theory to understand the principles of environmental protection. This will be achieved by applying concepts learned in lecture to homework problems.
2. The secondary goal is to help students to understand the interactions between economic and environmental systems. Again, this will be achieved by applying concepts learned in lecture to homework problems.

## CLASS STRUCTURE

Occasionally we will go to breakout rooms with tasks to be completed on **Jamboard**. Bookmark this link so that you can easily jump there when it's time: [Jamboard Link](#)

If you haven't worked on Jamboard before, see a [beginner tutorial](#) on Youtube here:

## WELLNESS DAYS

We will not hold lecture on University wellness days that occur on lecture days: Tu 2/16, Th 3/11. I will do my best to allow for a light workload on the other wellness days (Mon 2/15, Fri 3/12, Mon 4/5)

## Course content

### **1. Microeconomics Review (1 week: T Jan 19, Th Jan 21)**

Class notes Chapter 1

### **2. Economics of Public Goods and Pollution (3 weeks: T Jan 26, Th Jan 28, T Feb 2 , Th Feb 4, T Feb 9, Th Feb 11)**

Class notes Chapter 2, 3

### **3. Standards, Taxes, Permits (3 weeks: Th Feb 18, T Feb 23, [Th Feb 25], T Mar 2, Th Mar 4, T Mar 9)**

Class notes, Chapter 4

Exam 1: Th Feb 25

### **4. Private Information (3 weeks: T Mar 16, Th Mar 18, T Mar 23 Th Mar 25, T Mar 30, Th Apr 1)**

Class notes Chapter 5

### **5. Spatial and Temporal Models (2 weeks: [T Apr 6] Th Apr 8, T Apr 13, Th Apr 15)**

Class notes Chapter 6

Exam 2: T Apr 6

**6. Carbon Regulation (1 week: T Apr 20, Th Apr 22)**

Class notes Chapter 7

**7. Ecosystem Service Markets (2 weeks: T Apr 27, Th Apr 29)**

Class notes Chapter 8

**8. Review class (T May 4)**

Review course material to prep for exam

COURSE REQUIREMENTS

There are three exams. The first two exams take place during the normal class time. The final exam will take place during the scheduled final exam period for the course.

GRADING

The two in-class exams count for 20 and 20 percent of the grade in the class. The final exam counts for 35 percent and the homework counts for 25 percent.

There are 8 problem sets. I will assign these once we get through the corresponding lecture material. Once assigned, you will generally have a 1 week to complete. Please submit all homework on Sakai (This could be done by scanning or taking clear pictures of handwritten work).

Please note that the University has extended the deadline in which students can opt into the pass/fail grading option. See here: <https://registrar.unc.edu/wp-content/uploads/sites/9/2021/01/Fall-20-Spring-21-Undergraduate-Grading-Accommodations-.pdf>

COURSE POLICIES

There are no make up exams. If you miss one, then you will receive a zero on that exam. Late homework will not be accepted, but the lowest homework grade will be dropped. The final exam is given in compliance with the UNC final exam regulations and according to the UNC Final Exam calendar.

COURSE RESOURCES

A comprehensive set of class notes is provided for free by the professor. These notes are posted on the Sakai page for the class.

IMPORTANT DATES

Thursday, February 25	Exam 1 (class 11)
Thursday, Apr 6	Exam 2 (class 21)
Friday, May 7, 12pm	Final Exam

### SYLLABUS CHANGES

The professor reserves the right to make changes to the syllabus, including homework due dates and test dates. These changes will be announced as early as possible.

### TECHNOLOGY SUPPORT

UNC's ITS Help & Support is available 24/7 for technical questions on Sakai, Zoom or Outlook. Note, they recommend using Firefox or Chrome rather than Internet Explorer, especially for Sakai.

### DIVERSITY STATEMENT

I value the perspectives of individuals from all backgrounds reflecting the diversity of our students. I broadly define diversity to include race, gender identity, national origin, ethnicity, religion, social class, age, sexual orientation, political background, and physical and learning ability. I strive to make this classroom an inclusive space for all students. Please let me know if there is anything I can do to improve, I appreciate suggestions.

### ASSESSIBILITY RESOURCES

The University of North Carolina at Chapel Hill facilitates the implementation of reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability or pregnancy complications resulting in barriers to fully accessing University courses, programs and activities. Accommodations are determined through the Office of Accessibility Resources and Service (ARS) for individuals with documented qualifying disabilities in accordance with applicable state and federal laws. See the ARS Website for contact information: <https://ars.unc.edu> or email [ars@unc.edu](mailto:ars@unc.edu). (source: <https://ars.unc.edu/faculty-staff/syllabus-statement>)

### COUNSELING AND PSYCHOLOGICAL RESOURCES

CAPS is strongly committed to addressing the mental health needs of a diverse student body through timely access to consultation and connection to clinically appropriate services, whether for short or long-term needs. Go to their website: <https://caps.unc.edu/> or visit their facilities on the third floor of the Campus Health Services building for a walk-in evaluation to learn more. (source: Student Safety and Wellness Proposal for EPC, Sep 2018)

### TITLE IX RESOURCES

Any student who is impacted by discrimination, harassment, interpersonal (relationship) violence, sexual violence, sexual exploitation, or stalking is encouraged to seek resources on campus or in the community. Please contact the Director of Title IX Compliance (Adrienne Allison –

Adrienne.allison@unc.edu), Report and Response Coordinators in the Equal Opportunity and Compliance Office (reportandresponse@unc.edu), Counseling and Psychological Services (confidential), or the Gender Violence Services Coordinators (gvsc@unc.edu; confidential) to discuss your specific needs. Additional resources are available at [safe.unc.edu](http://safe.unc.edu).

### HONOR CODE STATEMENT

1. **Special reminder for remote courses:** I expect all students to follow the guidelines of the UNC honor code. In particular, students are expected to refrain from “lying, cheating, or stealing” in the academic context. You can read more about the honor code at [honor.unc.edu](http://honor.unc.edu). In any course, including mine, what constitutes cheating can change from one activity to another. For example, collaboration may be encouraged for an assignment but qualify as cheating during an exam. Please see my guidelines for each activity, and if you are unsure, please ask me to clarify. In remote classes, there may be many temptations for using online exchange sites, such as Chegg. Note that these sites provide names of students who have used their materials, and they routinely cooperate with institutions around academic integrity issues. Please don’t get caught up with honor code issues just because it appears to be simple and untraceable. It is not!
2. All students are expected to follow the guidelines of the UNC honor code. In particular, students are expected to refrain from “lying, cheating, or stealing” in the academic context. If you are unsure about which actions violate that honor code, please see me or consult [honor.unc.edu](http://honor.unc.edu). (*source: Department of Asian Studies*)
3. Students are bound by the Honor Code in taking exams and in written work. The Honor Code of the University is in effect at all times, and the submission of work signifies understanding and acceptance of those requirements. Plagiarism will not be tolerated. Please consult with me if you have any questions about the Honor Code. (*source: syllabus from section of HIST 486 offered in 2015*)
4. The University of North Carolina at Chapel Hill has had a student-administered honor system and judicial system for over 100 years. The system is the responsibility of students and is regulated and governed by them, but faculty share the responsibility. If you have questions about your responsibility under the honor code, please bring them to your instructor or consult with the office of the Dean of Students or the Instrument of Student Judicial Governance. This document, adopted by the Chancellor, the Faculty Council, and the Student Congress, contains all policies and procedures pertaining to the student honor system. Your full participation and observance of the honor code is expected ([honor.unc.edu](http://honor.unc.edu)). (*source: syllabus from section of GEOG 67 offered in 2015*)