University of California, San Diego Department of Economics Spring 2020

## **ECON 131: Environmental Economics**

Prof. Augusto Nieto Barthaburu

Email: anieto@ucsd.edu Lectures: TuTh 6:30-7:50

Zoom: <a href="https://ucsd.zoom.us/j/168728602">https://ucsd.zoom.us/j/168728602</a>
Office Hours: Tuesday 10:30-noon
Zoom: <a href="https://ucsd.zoom.us/j/491474306">https://ucsd.zoom.us/j/491474306</a>

Website: Canvas

This will be an unusual quarter! I hope that the information in this syllabus won't need to be revised later. But we are all part of a big experiment now, and there is a chance that we will need to make adjustments as we go along.

We had to move all instruction online on a very short notice. In order to make this course work we will need everyone's help!

### **Textbook**

Tom Tietenberg and Lynne Lewis, *Environmental and Natural Resource Economics* (ENRE), 11<sup>th</sup> Edition (2018).

This text is a comprehensive introduction to the economics approach to environmental problems. We will follow the textbook fairly closely during the course.

An eBook is available as a purchasing option for this course. You can access this eBook by clicking the RedShelf tool within "Modules" section on Canvas. If you opt-in to this eBook by clicking the Opt-in Now button your student account will be charged directly. You will also receive an email with the exact amount of this charge. Within the add/drop period you may also opt-out of the ebook if you decide you'd rather use an alternate format. If you opt-in for the ebook but want to cancel the purchase, you must do so by Saturday, April 11 to avoid being charged.

### **Course Description**

The purpose of this course is to provide an introduction to environmental problems from an economic perspective. In the first part of the course we will introduce economic tools that will be useful to think about environmental economics issues. The main application in this part is pollution control, which is intimately related to climate change mitigation. The second part of the course will deal with efficient use of natural resources, including oil, water, land, forests and fisheries.

### **Course Website**

We will use a web page located on Canvas. We will post all information relevant to the course, the syllabus, lecture notes, problem sets, solutions, etc. on the website. You should check the course's webpage regularly.

### Canvas discussion board

There is an online discussion board on Canvas. We will check the discussion board regularly and answer questions. The discussion board will be our preferred way to answer questions on the course's material.

# **Lectures' recordings**

All lectures will be on Zoom, and they will be recorded. The videos will be available on Canvas after each lecture. In principle, you can watch lectures at any time after they take place. My recommendation, though, is that you attend lectures in real time. Having the discipline to attend lectures as in a regular quarter will help you be current with the course's material. And it will also give the quarter a much-needed sense of normalcy.

#### Exams

There will be 4 exams during the quarter. All exams, except for the last one, will be during lecture time on the corresponding dates, starting at 6:40 PM sharp. The last exam will be on June 9 starting at 7:10 PM. All exams will last for 1 hour. They will be open-book, open-notes. But there will be time pressure, so my recommendation is that you take them as if they are closed-book. If you are checking your notes during a test, you won't have time to finish it.

I understand that some of you are in different time zones. Unfortunately, to prevent issues of academic dishonesty all students must take exams at the same time. There is no way around this, so if you won't be able to take the exams at the assigned dates/times, you are advised not to take this course this quarter.

Exams will be taken on Canvas. During each exam we need all students to login to Zoom to take their tests, following the Zoom link for that day's lecture. You can use Zoom from your cel phones, but you will need also a computer/tablet for taking the exam. You must be on camera on Zoom for the full duration of the exam for your test to be valid. The Zoom sessions will be recorded, and we will delete them at the end of the quarter if there are no integrity issues. In order to take the exams, you must login to Zoom using your UCSD email address and your real name.

### Exam dates:

Exam 1: Thursday, April 16 at 6:40 PM.

Exam 2: Tuesday, May 5 at 6:40 PM.

Exam 3: Thursday, May 21 at 6:40 PM.

Exam 4: Tuesday, June 9 at 7:10 PM.

Exams are **NOT** cumulative.

Your grade will be based on the highest three scores in your exams, with equal weights.

#### Homework

Homework will be posted on Canvas, but not collected. Solutions for each problem set will be provided after a few days. It is very important that you work on the problem sets and understand them, since they are the best preparation for exams.

**Teaching Assistants** 

Name	Email	Location	Office Hours
Anastasiia Faikina	afaikina@ucsd.edu	https://ucsd.zoom.us/j/435811153	Friday 3:00-4:30 PM
Bruno Lopez Videla	brlopezv@ucsd.edu	https://ucsd.zoom.us/j/618563109	Wednesday 4:30- 6:00 PM

### **Administrative Issues**

- 1. If you have a documented disability, please send an email to Gabriela Ray (gray@ucsd.edu) including your documentation, so she can work on your accommodations.
- 2. UCSD now has automated waitlists, and instructors cannot move students from the waitlist to the course's roster.
- 3. There will be absolutely no makeup exams. Your lowest-score test will be automatically dropped from grade computations. You should not skip an exam that you can take, just in case you get sick later in the quarter and need to miss a test for health reasons.
- 4. Academic dishonesty will not be tolerated. Students are expected to do their own work, as outlined in the UCSD Policy on Integrity of Scholarship. All suspected cases of academic dishonesty will be reported to the Academic Integrity Coordinator. In addition to the penalties imposed by the Academic Integrity Review Board, I also reserve the right to fail students found guilty of academic misconduct.

# **COURSE OUTLINE**

# **PART I: Markets and the Environment**

**Topic 1:** Introduction ENRE, Chapter 1

**Topic 2:** Valuing the Environment ENRE, Chapters 3 and 4

**Topic 3:** Externalities, Property Rights and Pollution Control ENRE, Chapters 2 and 14

# **PART II: Markets and Natural Resources**

**Topic 4:** Depletable Resources: Dynamic Efficiency ENRE, Chapter 5

**Topic 5:** Water ENRE, Chapter 9

**Topic 6:** Land Use ENRE, Chapter 10

**Topic 7:** Forestry ENRE, Chapter 11

**Topic 8:** Fisheries ENRE, Chapter 12