

ENVS 30: Introduction to environmental economics

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Course objectives

The goal of this class is to empower you to evaluate environmental issues through the lens of economics. After completing this course, you should be able to apply economic theory to identify causes underlying environmental issues and propose solutions to those problems.

Textbook and readings

The required textbook for the class is Markets and the Environment (2nd edition) by Keohane and Olmstead. I strongly encourage you to finish the week's textbook readings before class on Monday. This will make it easier for you to understand the simulations and engage in the reflections, and will set you up for success on the problem sets. I've selected this text for a few reasons. First, as a UCSB student, you should have free access to the textbook through Springer [at this link](#). More importantly, the textbook provides a good, concise introduction to economic theory while focusing upon the application of that theory to pressing environmental problems.

Course structure

ENVS30 has been redesigned for effective, remote instruction. We will combine synchronous and asynchronous elements to give you flexibility, while providing opportunities for interaction. The course will consist of the following elements:

- **Lectures:** Pre-recorded lectures will present key concepts, terminology and theory. These lectures will be posted by 10 PM on Thursday evenings. You are expected to watch these lectures. Students who actively engage with the material by posting questions to the class discussion forum by Tuesdays at 5PM will receive extra credit at the end of the quarter.
- **Simulations:** During class time on Mondays, we will meet synchronously to run through economic simulations and games to deepen your understanding of key concepts. Attendance is required, and you will have to respond to short questions about the simulation by 5:00 PM on Friday.
- **Reflections:** Short writing and reflection assignments based on real-world environmental challenges will be posted each Thursday at 10PM. You will be expected to submit your response to this assignment before the start of class on the following Wednesday. We will meet synchronously on Wednesdays discuss these topics and answer any unresolved questions from the lectures. Attendance during these synchronous sessions is required.
- **Problem sets:** Problem sets will be posted each Thursday at 10PM. You will be expected to submit your responses by 5PM on the following (8 days later) Friday.
- **Office hours:** You can schedule one on one office hours with Albert and Robert using the link on Gauchospace. In addition, we will use the section times to schedule additional, optional review sessions to help you work through the problem sets.

Weekly schedule

During a typical week, you will need to be available for synchronous activities during the scheduled class time on Mondays and Wednesdays, but are not required to be available for your scheduled discussion section. Each week, you will complete a variety of asynchronous activities, including: (a) watch pre-recorded lectures and ask questions, (b) complete assigned readings, (c) answer simulation questions, (d) complete econ reflections, and (e) complete problem sets. A typical week will look something like this:

| Day | Activity | Category | Time |
|-----------|---------------------------|-------------------------------|--------------|
| Thursday | Lectures available | Assignment uploaded | 10:00 PM |
| | Problem set available | Assignment uploaded | 10:00 PM |
| | Econ reflection available | Assignment uploaded | 10:00 PM |
| Monday | Simulation | Synchronous class | 2:00-3:15 PM |
| Tuesday | Post questions to forum | Assignment due (extra credit) | 5:00 PM |
| Wednesday | Submit econ reflection | Assignment due | 2:00 PM |
| | Reflection discussion | Synchronous class | 2:00-3:15 PM |
| Thursday | Review section | Synchronous class (optional) | 4:00-5:00 PM |
| Friday | Submit simulation answers | Assignment due | 5:00 PM |
| | Submit problem set | Assignment due | 5:00 PM |

Grading

In light of the chaotic, unpredictable and stressful circumstances, I have replaced the midterm and final exams with more frequent, but lower-stakes, assignments. In addition, I have baked in some flexibility to allow you to miss a few assignments without any penalty. Your final grade will be based on three components:

- Simulations (25% of course grade): We'll end the Monday simulations with a set of questions that should reinforce the main points from the game. You'll need to submit your final responses to these questions by Friday at 5:00 PM. We will drop your lowest grade in this category, so you can miss one of these assignments with no penalty.
- Econ reflection (25% of course grade): Our Wednesday classes will be used to discuss how economics relates to an issue in environmental studies. Before these classes, you'll need to read/watch/listen to selected pieces and answer a few questions about them. The questions will prepare you for discussion and won't be graded for being correct – you'll receive a participation grade for submitting your answers and participating in the discussion. We will drop your lowest grade in this category, so you can miss one of these assignments with no penalty.
- Problem sets (50% of course grade): Problem sets will give you an opportunity to demonstrate your understanding of the course material. Problem sets will be due on Fridays at 5:00 PM. We will drop your lowest grade in this category, so you can miss one of these assignments with no penalty.

Late assignments

The grading of simulations, econ reflections and problem sets (see above) allow for you to miss some assignments/classes. As a result, I won't provide additional flexibility for absences or late submissions of assignments, with the exception of verified emergencies.

Other resources

The Mental Health Peer Program (MHPP) is a UCSB campus resource offering guidance with regard to stress management, anxiety, depression and other related challenges. They offer a range of resources, including psychological counseling services and the Test Anxiety Program (for students experiencing mild to moderate anxiety before and/or during an exam). MHPP is located in Counseling and Psychological Services (CAPS), Building 599. Phone consultations are available 24 hours: (805) 893-4411.

Students with disabilities are encouraged to contact the Disabled Students Program to get documentation of needs and to generate suggestions for reasonable accommodation (room 2120 Student Resources Building,

phone: 805.893.2668; email: DSP.Help@sa.ucsb.edu). Requests for accommodation via the Disabled Students Program will be granted.

Academic integrity

It is expected that all UCSB students will support the ideal of academic integrity and that you will be responsible for the integrity of your work. The strictest disciplinary action will be pursued in all instances of academic misconduct. Academic misconduct includes (among other things): cheating on assignments or tests; plagiarizing any part of work done by someone else; and submitting the same (or substantially similar) work for two courses without the professor's consent. For more information, see the Office of Judicial Affairs page on "Academic Integrity": <http://judicialaffairs.sa.ucsb.edu/AcademicIntegrity.aspx>

Quarter schedule

The topics we will cover this quarter, and associated reading assignments in Keohane and Olmstead (KO), will follow this rough schedule:

| Week | Dates | Topic | Readings |
|------|---------------------|------------------------------|------------|
| 1 | March 29 - April 4 | Economic efficiency | KO 1-34 |
| 2 | April 5 - April 11 | Costs and benefits | KO 35-68 |
| 3 | April 12 - April 18 | Costs and benefits (cont) | |
| 4 | April 19 - April 25 | Markets | KO 69-79 |
| 5 | April 26 - May 2 | Externalities | KO 80-86 |
| 6 | May 3 - May 9 | Public goods | KO 86-91 |
| 7 | May 10 - May 16 | Commons | KO 91-98 |
| 8 | May 17 - May 23 | Market based solutions | KO 139-167 |
| 9 | May 24 - May 30 | Market based solutions | KO 168-198 |
| 10 | May 31 - June 6 | Market solutions in practice | KO 199-230 |