

ECONOMICS 134: ENVIRONMENTAL ECONOMICS
INSTRUCTOR: EDWARD MCDEVITT
UCLA, SUMMER SESSION A, 2026 ONLINE
(Session A: June 22nd, Monday, to July 8th, Wednesday)

Lecture Days and Times: MW 8:30 AM to 10:35 AM (PST). **On-Line Website:** <https://bruinlearn.ucla.edu/courses/229281>

Course Lecture and Exams: This course is a synchronous on-line (I have placed the link under Zoom section on the course website). I will also be recording the lectures and will be posted under “Media Gallery” on course website. Please note the course is synchronous, so my “live” lectures 8:30 AM to 10:35 AM (PST). Very important: synchronous also means that the exams are ONLY given at 8:30 to 10:35 AM (PST) on the dates listed below—there will be no exceptions.

Office Hours: TBD. (we will use the same Zoom link for OH as we use zoom lectures). I also hold additional office hours in the week leading up to an exam.

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University Holidays: Friday, July 3rd. Obviously, this will have no impact on our class.

COURSE DESCRIPTION: This course uses the tools of standard microeconomic theory (especially Econ 11, Intermediate Micro) to analyze and understand environmental and natural resources issues and potential policy prescriptions. Issues include (to name some) pollution, policy response to pollution, optimal rate of depletion of exhaustible resources such as oil and minerals, renewable resources and the “tragedy of the commons” such as fisheries and forests, economics of recycling, water topics including potential water markets and past California droughts, and global climate change issues. Empirical studies to be provided.

Textbook: There is no required textbook, I have posted my lecture notes. The live lectures will follow these notes closely. In addition, I will also be posting any updates to notes weekly.

As already noted, I will be posting the recorded versions of these on course website under Media Gallery.

Study Questions: Study questions with solutions will be provided. They will be posted on the course website at <https://bruinlearn.ucla.edu/courses/229281>

The study questions are very useful for preparing for the exams. Make sure you do all of the questions. Also, try making up your questions, perhaps variations on the study questions. In addition to study questions, I post other optional readings and/or links. In addition to the SQs, I will post old exam questions as we approach exams.

EXAMS: There will be two online exams. *All exams are open book/open notes.* The approximate weighting of the exams is as follows:

First Exam (on-line, Wed., Week 3, July 8th, only at 8:30 to 10:35AM PST)- 45%.

Second Exam (on-line, Wed., Week 6, July 29th only at 8:30 to 10:25 AM)-55%.

The weights will not be changed.

EXAMS: There will be two *online* exams as mentioned above. The second exam is NOT cumulative. Again, the exam times are at the regularly scheduled time for the class (PST). You will be given the entire class time. Exams will consist of multiple choice questions, fill-in-the-blanks questions, and a small number of (probably only one) essay/problem questions. I use the word “essay” very broadly to mean anything from graphs, math and/or written explanation. All exams are open book/open note. You can use a calculator (but generally not needed), but no other electronic device (for example, iPads are NOT allowed). Because these are online exams, extra exam precautions will have to be taken—I will provide details later, however, at least one is a “cameras on” policy.

POLICY ON MISSED EXAMS: Exams must be taken at one of the scheduled times. Please note that department policy does not allow for any makeup exam to be administered if a student misses a midterm (<https://economics.ucla.edu/undergraduate/common-syllabus/>). If a student has a legitimate reason (by “legitimate reason” I mean something serious and unanticipated) and can provide acceptable documentation of such of an excuse, then additional weight will be placed on the last exam (I make an adjustment based on degree of difficulty if the final exam has a significantly different mean score). Any such documentation, such as a doctor’s note, should clearly state that the student was incapacitated and was therefore unable to take the exam or faced a serious impediment that prevented attendance at the exam. A student who misses an exam without a valid, verifiable excuse will receive a zero. If due to a verifiable emergency, a student misses the last exam, then that student will be required to take a makeup exam administered by the instructor at a time to be arranged. If a student misses all exams this student will receive an automatic grade of “F”. *Please note that “self-generated” notes from the Ashe Center will not be accepted.*

Center for Accessible Education (CAE): Any student with a pre-existing illness or condition who requests special arrangements must (a) qualify under CAE rules for

such special arrangements and (b) must take the exam with CAE. Any such arrangements with CAE must be communicated to the instructor during the first week of classes. For additional information and the qualification conditions of the *Center for Accessible Education* please visit their website at <https://www.cae.ucla.edu/>. All other students must take the exam at the scheduled time under the same time constraints. It is the responsibility of all students who request special arrangements with CAE to be familiar with all of their rules as well as the rules of this class.

ACADEMIC DISHONESTY

Any cases of cheating will be reported to the Office of the Dean of Students. For more details please refer to the Office of the Dean of Students website at <https://www.deanofstudents.ucla.edu/Academic-Integrity>

ORDER OF TOPICS

1. Introduction and a note on methodology. How economists see the environment. Environmental issues overview.
2. Review of basic economic concepts: market efficiency, welfare economics (consumer surplus/producer surplus, social total). Present value, net present value (the PV review will actually be later when we do renewable resources). Optimal outcomes and source of market failures.
3. Externalities and public goods. Efficiency implications of externalities and public goods. Property rights and the Coase Theorem. When the Coase Theorem fails to hold and what this implies. Broadly, the discussion of the Coase Theorem ties in with the question on market solutions (rather than government regulation) for externality problems such as pollution etc.
4. Regulating Pollution: emission taxes (Pigouvian tax), standards, mandated technologies; Policy under uncertainty—taxes vs. standards. Tradable pollution permits (example: California).

First Exam, July 8th, Wednesday ;

5. Non-renewable resources (example: oil, minerals, natural resources in general). Hotelling rule, optimal extraction and use of non-renewable resources. Extensions of basic model.

6. Renewable resources and common-property problems (example: fisheries, endangered species). Biological and Economic models. Economics of forestry issues.
7. Economics of water institutions and (potential) water markets: Recent California droughts. Surface water and ground water economics.
8. Global climate change. Overview, national and international climate policy. Weitzman “fat tail” argument. Price and quantity controls. Climate change and economic adaptation. The Green Paradox.
9. (time permitting) Long-run economic growth and other topics: Population growth, Environmental Kuznets curve.

Second Exam, July 29th, Wednesday.;