

—Hyperlinks in electronic versions of this document are clickable—

ECONOMICS 3250
Spring 2025

Professor Lozada
Gardner Commons, Rm. 4030
Phone: (801) 581-7650
lozada@economics.utah.edu
www.econ.utah.edu/lozada

CLASS MEETING TIME and PLACE: MW 3:00–4:20 PM in Gardner Commons 1760.

COMMUNICATIONS: I will send messages to you via your UNID e-mail addresses at utah.edu. You must be sure you read that inbox, or forward its messages to an inbox which you do regularly read.

COVID-19 REMARKS (given by the Dean of the College of Social and Behavioral Sciences): If you are not feeling well, especially if you are experiencing symptoms of the flu or COVID-19, you should not attend class in person and should contact the professor as soon as possible to make alternative arrangements. You should follow Centers for Disease Control guidelines concerning vaccines, recommendations for mask-wearing when indoors, testing for COVID-19, and quarantining after an exposure to COVID-19. These guidelines are located at <https://www.cdc.gov/coronavirus/2019-nCoV/index.html>.

At least at the beginning of the semester, I will be wearing a mask. Here is a picture in order to let you know what the rest of my face looks like:



TEXT: *Environmental Economics: An Elementary Introduction*, by R. Kerry Turner, David Pearce, and Ian Bateman. Johns Hopkins University Press. ISBN 0-8018-4863-6.

Old exams are available at www.econ.utah.edu/lozada (click on “Econ. 3250”). Answers to most of the old exams are there too. Studying them is a very good

way to prepare for exams, although some brand-new material will be presented this semester and may be asked about on your exams. Also on the class website are videos explaining all of the material of the class as of approximately the year 2020, and videos of many class review sessions from 2021.

COURSE DESCRIPTION: We will study the way firms use the natural environment; externalities; the effects of different types of government regulation on firm behavior, consumer welfare, and the natural environment (including plants and animals); the ethics of resource depletion; and environmental degradation in developing countries. This course has no prerequisites, either in Economics or in Mathematics. As an alternative to this course, Econ. 5250 is available for students (mostly Economics majors) who meet its prerequisite requirements and who desire a significantly more mathematical coverage of these topics.

COURSE OVERVIEW: We will cover the economic causes of environmental degradation; economic decision-making and the environment; methods of business regulation which governments can use to protect the environment; depletion by firms of renewable and non-renewable natural resources, and whether such depletion is appropriate or not; the application of these general considerations to specific environmental problems; and non-orthodox economic approaches to environmental destruction and resource exhaustion.

TENTATIVE SCHEDULE:

Although the following schedule is tentative, I will always give you at least one week's notice of the *exact* date of your exams.

<u>Dates</u>	<u>Chapters</u>
1/6, 1/8:	5 (How Markets Work and Why They Fail)
1/13, 1/15:	6 (How Governments Fail the Environment), 7 (Cost-Benefit Thinking)
1/22, 1/27, 1/29:	8 (Valuing Concern for Nature), 9 (Coping With Uncertainty)
2/3, 2/5:	10 (Using the Market to Protect the Environment)
2/10, 2/12, 2/19:	11 (Charging for Use of the Environment), Exam 1 (Chs. 5–11)
2/24, 2/26:	12 (Green Taxes), 13 (Trading Environmental Permits)
3/3:	14 (Setting Environmental Standards)
3/5:	15 (Renewable Resources)
3/17, 3/19, 3/24:	16 (Non-renewable Resources), 17 (Business and the Environment)
3/26:	18 (Managing Waste)
3/31, 4/2:	Exam 2 (Chs. 12–18); 19 (Climate Change)
4/7, 4/9:	20 (Economics and the Ozone Layer), 21 (Conserving Biological Diversity)
4/14:	22 (International Environmental Policy: Acid Rain), 23 (Environment in the Developing World)
4/16:	1 (The Big Economy), 2 (Environment and Ethics)
4/21:	3 (Economic Growth, Population Growth, and the Environment), 4 (Sustainable Development)
Friday April 25:	comprehensive Final Exam from 3:30–5:30 pm

COURSE OBJECTIVES: The objective is for you to: (1) develop an understanding of the approach which orthodox (“neoclassical”) economists use to determine what amount of environmental degradation and natural resource depletion is appropriate; and (ii) be able to critically evaluate the strengths and weaknesses of the neoclassical approach. As economist Joan Robinson once wrote (*Collected Economic Papers*, 1980, Vol. 2 p. 17):

“The purpose of studying economics is not to acquire a set of ready-made answers to economic questions, but to learn how to avoid being deceived by economists.”

Specific learning objectives are to understand:

1. market failures and government failure related to the environment
2. how to value concern for nature, and how to use that value in Cost-Benefit Analysis (under certainty and under uncertainty)
3. how “green taxes” work
4. how “cap and trade” programs work

5. the history of environmental policymaking
6. regulation of fisheries, extractive industries, waste disposal, greenhouse gas emissions, ozone-destroying chemical emissions, emissions causing acid rain, and activities harming endangered species
7. environmental policymaking in developing countries
8. ethical concerns in environmental policymaking
9. the effect of population growth on the environment.

Sustainability Course Attribute: This course fulfills the University of Utah requirements for the sustainability course attribute because the above Econ. 3250 learning objectives are related to the [UN Sustainability Goals](#) in the following ways:

Goal 6: Clean Water & Sanitation, Learning Objectives 1–7, 9

Goal 7: Affordable & Clean Energy, Learning Objectives 1–6, 9

Goal 10: Reduced Inequalities, Learning Objectives 2–5, 7, 8

Goal 11: Sustainable Cities & Communities, Learning Objectives 1–6, 9

Goal 12: Responsible Consumption & Production, Learning Objectives 1–8

Goal 13: Climate Action, Learning Objectives 1–6, 8, 9

Goal 14: Life Below [meaning, “in”] Water, Learning Objectives 1–6, 8

Goal 15: Life on Land, Learning Objectives 1–6, 8.

COURSE WORKLOAD: This is a 3 credit hour course. According to the University of Utah’s Policy 6-100 III Sec. 3F (see www.regulations.utah.edu/academics/6-100.php), “at the University of Utah we assume that there is at least one hour in class and two hours outside of class per week [or the equivalent combination] connected to every credit hour” (brackets added). So you should expect to study for Econ. 3250 about 6 hours outside of class every week.

MY BACKGROUND: My current rank is Associate Professor. I hold a BA degree in Economics and a BS degree in Physics, both from Louisiana State University. I hold an MS degree in Engineering-Economic Systems, an MA degree in Economics, and a PhD degree in Economics, all from Stanford University. My main area of research is the microeconomic theory of exhaustible resource industries, both from a neoclassical and from an “ecological economics” perspective. Knowing

physics is quite helpful in the second type of approach. However, I have published work in other areas of dynamic economics, such as finance. For the last few years most of my research has concerned flaws in the theory of cost-benefit analysis, although I have also done some work on water use in Utah, especially highlighting the role of agriculture. I regularly teach microeconomics at the undergraduate and PhD levels, and resource and environmental economics at the introductory, advanced undergraduate, and advanced PhD levels. I have also taught Mathematical Economics at the PhD level.

OFFICE HOURS: MW 2:00pm–3:45pm. You may also make an appointment to see me at a different time, in person or on Zoom. In addition, you can stop by my office without an appointment at any time, and if I am not being pressured by other work, I will make time then to answer your questions.

GRADING: There are a total of 100 points possible for the semester. There will be two closed-book in-class exams, each worth 25 points. The final exam will be comprehensive, and will be worth 50 points. At the end of the semester, your course grade will be based on the sum of the grades you have made on the three exams. *No “extra credit” is possible: if you are worried about passing this class, study very long and hard for the exams.* As a rough guide, I do not expect the final grade distribution to be significantly worse than the following: 15%, A/A–; 30%, B+/B/B–; 35%, C+/C/C–; 15%, D+/D/D–; 5% or less, E.

You should bring a [blue book](#) to the exams, although I will also bring blank sheets of paper for you to write your answers on if you do not have a blue book.

The reason that neither class attendance nor class participation is part of the grade is that this is primarily a lecture course, so class discussions are not a fundamental part of the teaching and learning method. *However*, in class I very often give details which are not in the textbook; I often give explanations which are not in the textbook; and I occasionally cover entire topics which are not in the textbook. This makes it very difficult to do well on exams unless you either regularly attend class or watch the videos.

The instructions to my exams say, in part, that “correct answers which are unsupported by explanations will not be awarded points.” Students often wonder how much explanation they should put in their answers. A rule of thumb is that you do not have to explain things you knew before you started taking this class, but you have to explain everything you learned since you started taking this class. Do not assume anything is “obvious” unless you knew it before you began taking this class and you are sure most other students knew it before they began taking this

class. If you have any doubt about the adequacy of your answer during a test, just ask me during the test. That's one of the things I am there for.

POLICIES:

1. You cannot miss an exam and take a makeup exam unless I give you permission to do so. Without my permission, you will earn a zero on any exams which you miss.

To get my permission to take a makeup exam, you must give me notice before the class takes its exam (if at all possible), and before you take the makeup exam, you must supply written evidence of your reason for missing the in-class exam. If the reason is illness, a note from a doctor will be sufficient.

I will let you know if I think your reason is good enough to warrant letting you take a makeup exam. If your reason is that you are participating in a university-sponsored activity or are ill, I will always allow you to take a makeup. Otherwise, I will make the decision on a case-by-case basis.

In addition, there are limited circumstances in which I may let you take an exam early.

The final exam time and date is listed on the schedule above. If you have a schedule conflict, resolve it now. I will only give a makeup final after the regularly scheduled final if: (a) circumstances beyond your control (such as illness or a car breakdown or the death of a close relative or a work-related out-of-town trip) prevented you from taking the final; and (b) you notified me as soon as you could, and you later supplied proof acceptable to me of what happened; and (c) the circumstances you cite were sufficient in my view to justify your missing the final.

2. Canvas: We will not be using Canvas in this class (though I plan on activating one Canvas page to redirect students). See the web site at the URL near the top of page 1 for more information.

UNIVERSITY POLICIES AND INFORMATION:

1. Incompletes will be given only for reasons of illness or a family emergency. You must supply written evidence for the reason. According to university regulations (Policy 6-100 III Section G2, at <http://regulations.utah.edu/academics/6-100.php>), you must be passing the class at the time you get an incomplete.

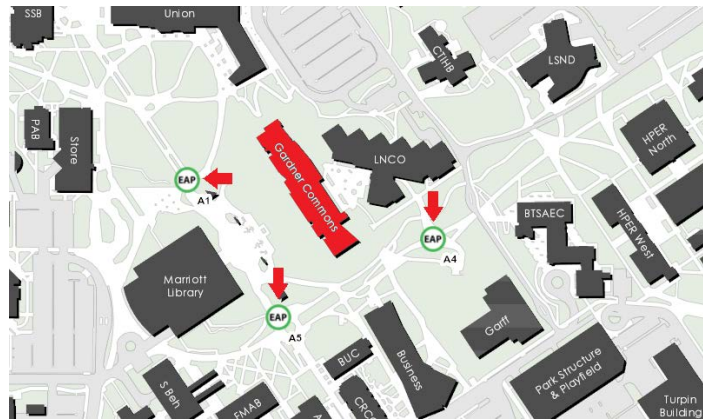
2. Cheating on exams and other forms of academic dishonesty may lead to expulsion from the class, failure of the class, or more severe penalties. Under University Policy 6-400, Section V, “Academic Misconduct,” B4 (<http://regulations.utah.edu/academics/6-400.php>), I am required to submit a report of all incidents of academic dishonesty to your dean for inclusion in your file.
3. All students are expected to maintain professional behavior in the classroom setting (including “virtual classrooms”), according to the Student Code, available at www.regulations.utah.edu/academics/6-400.php. Students have specific rights in the classroom as detailed in Section II of the Code. The Code also specifies proscribed conduct (Sections III and V) that involves cheating on tests, plagiarism, and/or collusion, as well as fraud, theft, etc. Students should read the Code carefully and know they are responsible for the content. Students have the right to appeal sanctions imposed under the Code to the Student Behavior Committee.
4. ADA Statement: The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability & Access (“CDA”), 162 Olpin Union Building, (801) 581-5020 (V/TDD), <http://disability.utah.edu/>. CDA will work with you and me to make arrangements for accommodations. All written information in this course can be made available in an alternative format with prior notification to the CDA.
5. Addressing Sexual Misconduct: Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability, and victims are entitled to the same kinds of support, as in the cases of offenses against persons in other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran’s status or genetic makeup. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, SSB 328, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS).
6. Campus Safety: The University of Utah values the safety of all campus community members. To report suspicious activity, call campus police at 801-

585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit <https://safeu.utah.edu/>. In cases of domestic violence or the threat of domestic violence (including intimate partner danger in a dating relationship), another source of assistance is the Utah Domestic Violence Coalition, whose phone number is 800-897-5465.

7. Undocumented Student Support: The Dream Center offers a wide range of resources to support undocumented students (with and without DACA) as well as students from mixed-status families. To learn more, please contact the Dream Center at 801-213-3697 or visit <https://dream.utah.edu/>.
8. Wellness statement: Personal concerns such as stress, anxiety, relationship difficulties, depression, illness, or cross-cultural differences can interfere with a student's ability to succeed and thrive at the University of Utah. For helpful resources contact the University Counseling Center at the Student Services Building, Rm 426, or at <https://counselingcenter.utah.edu>, or at 801-581-6826. For after-hours emergencies, contact the 24/7 Crisis Line at 801-587-3000. For information on contacting a Student Success Advocate, see <https://studentsuccess.utah.edu/advocates/our-mission-faqs/>, and for links to more than a dozen other student support offices such as the Learning Center, the Dean of Students Office, and the Center for Ethnic Student Affairs, see <https://studentsuccess.utah.edu/resources/student-support/>.
9. Emergency Evacuation: If you receive a notification to evacuate during this class either by the campus text alert system or by a building fire alarm, please proceed in an orderly fashion to one of the Emergency Assembly Points ("EAP") marked on the map below. At the EAP, you will receive further instructions from Emergency Management personnel. If you are taking an exam when the evacuation order comes, *immediately* stop working on the exam and leave the exam, your answers to it, and any other exam material on your desk.

For further information about the Campus Alert System, including instructions to ensure your cell phone will receive emergency alerts, see <http://www.campusalert.utah.edu>.

CSBS EMERGENCY ACTION PLAN



BUILDING EVACUATION

EAP (Emergency Assembly Point) – When you receive a notification to evacuate the building either by campus text alert system or by building fire alarm, please follow your instructor in an orderly fashion to the EAP marked on the map below. Once everyone is at the EAP, you will receive further instructions from Emergency Management personnel. You can also look up the EAP for any building you may be in on campus at <http://emergencymanagement.utah.edu/eap>.



CAMPUS RESOURCES

U Heads Up App: There's an app for that. Download the app on your smartphone at alert.utah.edu/headsup to access the following resources:

- **Emergency Response Guide:** Provides instructions on how to handle any type of emergency, such as earthquake, utility failure, fire, active shooter, etc. Flip charts with this information are also available around campus.
- **See Something, Say Something:** Report unsafe or hazardous conditions on campus. If you see a life threatening or emergency situation, please call 911!

Safety Escorts: For students who are on campus at night or past business hours and would like an escort to your car, please call 801-585-2677. You can call 24/7 and a security officer will be sent to walk with you or give you a ride to your desired on-campus location.