

ECONOMICS 5250/6250
Fall 2011

Professor Lozada
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CLASS MEETING TIME & PLACE: MW 11:50 AM-1:10 PM in 236 HPR North.

TEXT: *Economics of Natural Resources and the Environment*, by David W. Pearce and R. Kerry Turner.

Old exams are available at www.econ.utah.edu/lozada (click on "Econ. 5250").

COURSE DESCRIPTION: Air, water, and ground pollution; public policies to reduce pollution (including taxes, quotas, and tradable permits); destruction, valuation, and protection of natural environments and the species within them. The United States and other nations are considered. Also exploitation and depletion of nonrenewable energy and mineral resources; equity between different human generations; natural reproduction and human harvesting of fish and trees; extinction of species; entropy, thermodynamics, and the prospects for perpetual economic growth. Prerequisite: ECON 4010 or all of the following: ECON 2010, 2020, 3250, and knowledge of college algebra. (With the instructor's consent, ECON 1010 may be used instead of 2010, 2020). Recommended Prerequisite: ECON 3620.

COURSE OVERVIEW: We will first study environmental economics, which is the economics of pollution: why do firms pollute, how much ought they pollute, and various ways of bringing their pollution closer to the socially optimal level. We will next study natural resource economics, which is the economics of resource depletion: how do firms decide how much of a renewable resource (e.g., fish) or an exhaustible resource (e.g., copper) to extract each year, how much ought they extract, and various ways of bringing their extraction closer to the socially optimal level if it is not there already. We will finally study some non-neoclassical approaches to pollution and resource depletion.

COURSE OBJECTIVES: For you to understand the neoclassical microeconomic theory of pollution and depletion; limitations and critiques of that theory; and some appreciation of non-neoclassical approaches to these issues.

COURSE WORKLOAD: This is a 3 credit hour course. According to the University of Utah's Policy 6-100 III Sec. C6, (see www.regulations.utah.edu/academics/6-100.html), "It is generally expected throughout the University 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 for the appropriately prepared student.” (brackets added). So you should expect to study for Econ. 4010 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. I regularly teach microeconomic theory 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. My Ph.D. students have written dissertations on such topics as the structure of oil auctions in Russia; the brine shrimp industry of the Great Salt Lake; and the influence of language (“framing”) on citizen opinions about environmental controversies.

OFFICE HOURS: My office hours this semester will be MW 10:50–11:45am. You may also make an appointment to see me. 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 will be a midterm exam worth 33 points and a comprehensive final exam worth 67 points. Your course grade will be based on the sum of the grades you make on the two exams. The midterm will cover Chapters 4–11 and 13–15; the final will cover the midterm chapters plus Chapters 16–19, 22, and 1–3. Chapters 20 and 21 will only be covered on the final if I have time to teach them at the end of the semester.

You should bring a blue book to the exams.

At the end of the semester, your course grade will be based on the sum of the grades you have made on the two exams. It will not be based on anything else: there is no way to do “extra work” at the end of the semester to raise your grade.

If you make above an 80% you are guaranteed to make an A; if you make above a 65% you are guaranteed to make at least a B; if you make above a 50% you are guaranteed to make at least a C; and if you make above a 35% you are guaranteed to make at least a D. Notwithstanding this scale, if the following curve resulted in higher grades then I would use it (approximately, not rigidly): 15% A, 35% B, 35% C, 10% D, 5% E.

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, 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 will be on the date given in the schedule at the end of this syllabus. If you have a schedule conflict (for example, with your job), 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) 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. 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 G2), you must be passing the class at the time you get an incomplete.
3. Cheating on exams and other forms of academic dishonesty may lead to expulsion from the class, failure of the class, or more severe penalties. In accordance with University regulations (University Policy 6-400, Section V, "Academic Misconduct," B4), if you are caught cheating in this class, I must send a letter to your dean about that, and the letter will be put in your permanent University file. I have done this for several students already, so don't cheat.
4. All students are expected to maintain professional behavior in the classroom setting, according to the Student Code, available at

www.regulations.utah.edu/academics/6-400.html.

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.

5. 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 Services, 162 Union Building, (801) 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations.

Note. If I am going to be more than five minutes late for class due to weather or other reasons, I will notify the Economics Department and a Departmental representative will meet the class and tell you when the class will begin. If no Departmental representative meets the class, you may inquire by calling the Economics Department at (801) 581-7481. You may find a description of my other responsibilities at www.regulations.utah.edu/academics/6-316.html.

TENTATIVE SCHEDULE:

- 8/22: Chapter 4 (“The Optimal Level of Pollution”)
 - 8/24: Chapter 5 (“The Market Achievement of Optimal Pollution”)
 - 8/29: Chapter 6 (“Taxation and Optimal Pollution”)
 - 8/31: Chapter 7 (“Environmental Standards, Taxes and Subsidies”)
 - 9/7: Chapter 8 (“Marketable Pollution Permits”)
 - 9/12: Chapter 9 (“Measuring Environmental Damage I: Total Economic Value”)
 - 9/14: continuation of Chapter 9; Chapter 10 (“Measuring Environmental Damage II: Valuation Methodologies”)
 - 9/19: continuation of Chapter 10
 - 9/21: Chapter 11 (“Pollution Control in Mixed Economies”)
 - 9/26: Chapter 13 (“Global Pollution Policy”)
 - 9/28: Chapter 14 (“Discounting the Future”)
 - 10/3: continuation of Chapter 14
 - 10/5: Chapter 15 (“Environmental Ethics”)
 - 10/17: Midterm Exam’s approximate date
 - 10/19: Chapter 16 (“Renewable Resources”)
 - 10/24: continuation of Chapter 16
 - 10/26: Chapter 17 (“The Extinction of Species”)
 - 10/31: Chapter 18 (“Exhaustible Resources”)
 - 11/2: continuation of Chapter 18
 - 11/7: Chapter 19 (“Measuring and Mitigating Natural Resource Scarcity”)
 - 11/9: continuation of Chapter 19
 - 11/14: Chapter 22 (“Environment and the Developing Countries”)
 - 11/16: continuation of Chapter 22
 - 11/21: Chapter 1 (“The Historical Development of Environmental Economics”)
 - 11/23: continuation of Chapter 1
 - 11/28: continuation of Chapter 1; Chapter 2 (“The Circular Economy”)
 - 11/30: continuation of Chapter 2; Chapter 3 (“The Sustainable Economy”)
 - 12/5: continuation of Chapter 3
 - 12/7: Either Chapters 20 (“Development, Preservation and Conservation”) and 21 (“A Case Study of Wetlands”) if there is still time to teach them; or, more likely, readings of H. Daly or N. Georgescu-Roegen.
- Tuesday Dec. 13: Final Exam from 10:30am–12:30pm.