

ECON 415: Environmental Economics

University of Illinois at Urbana-Champaign
College of Liberal Arts & Sciences
Department of Economics

Dr. Bryan Buckley

Fall 2018

108 David Kinley Hall

Meeting Time:

Section A3 A4 TTH 11:00-12:20

Communication:

Office: Room 29, David Kinley Hall

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Office Hours: Monday: 9:00 to 12:00 and 1:00 to 3:00
Wednesday 9:00 to 12:00

Catalog Description:

This course covers advanced undergraduate environmental economics with an emphasis on policy design and analysis. This course will focus on the economics of environmental issues and will start with establishing how property rights and environment quality interact. The course will then explore different methods of reducing inefficiency by using markets, incentive-based regulation and command and control regulation. The course will also explore trends in environmental data. (3 Hours) Prerequisite: ECON 302

Course Outcomes:

- Discuss the development of property rights and the effects of different property rights regimes on environmental quality.
- Graphically and mathematically analyze competitive markets with externalities.
- Graphically and mathematically analyze competitive markets for natural resources for dynamic efficiency.
- Discuss regulatory and non-regulatory methods of pollution control and the costs and benefits of each.
- Become familiar with trends in the data for environmental degradation and improvements.

Course Format:

This course will be lectures and PowerPoint presentations which will discuss elements from the reading and go into examples and deeper analysis. There will be readings from the required text as well as articles which will be provided online.

Required Items:

Textbooks:

Anderson and Libecap. (2014) Environmental Markets. *Cambridge University Press.*

Supplemental:

TI-89 Graphing Calculator

Student Assessment:

Final grades will be rounded to the nearest integer. There is no curve in this class.

Grade Weights

- Homework Assignments (30%)
- Data Project (15%)
- Midterm Exam I (15%)
- Midterm Exam II (15%)
- Final Exam (25%)

Plus/Minus Grade Cutoffs

A+ ≥ 97	90 > B+ ≥ 87	80 > C+ ≥ 77	70 > D+ ≥ 67	60 > F
97 > A ≥ 93	87 > B ≥ 83	77 > C ≥ 73	67 > D ≥ 63	
93 > A- ≥ 90	83 > B- ≥ 80	73 > C- ≥ 70	63 > D- ≥ 60	

Homework Policy

- *Late Assignments:* Homework will not be accepted late. Homework is late if it is not turned in at the beginning of the class or via email on the date that the assignment is due. The homework average will drop the lowest homework grade.

Exam Policy:

- The midterm exams will be given during the normal class time and at the usual room.
- There is no makeup for missing a midterm.
- If a student misses a midterm exam, the weight from the missed exam will be redistributed to the final exam.
- Students cannot take an exam and then drop the exam. Receiving the exam on exam day means that you will receive a grade for that exam.
- Students cannot miss the final.
- For each exam, you will be required to bring a Number 2 pencil, calculator, and your student ID Card. You will also be required to know your NET ID.
- No outside materials are permitted which includes, notes, textbooks, computers and tablets. Cell phones are not permitted in the exam room. If we see your cell phone, you will be considered to be cheating.
- All requests for grading corrections must be submitted with two weeks of receiving the graded exam.

Final Exam Policy:

Students who would like a conflict exam must contact the professor before the last day of classes (http://studentcode.illinois.edu/article3_part2_3-201.html). In the event that a student cannot attend the exam or the conflict exam, undergraduate students must obtain the approval of the dean of their college to defer a final examination without receiving a grade of "Absent from Exam" (ABS). Undergraduate students who must miss a final examination should report this fact to the dean of their college as soon as possible. For satisfactory reasons, students may be "excused" by the dean of their college and be examined later by their instructor (<http://www.las.illinois.edu/faculty/advising/incompletes/>). The date of the deferred exam will be the scheduled by the Department of Economics during the beginning of the next full semester.

Students who miss their scheduled exam time will receive an ABS grade. Students in this situation may take the deferred final if and only if they have taken the midterm exam. The ABS grade will be replaced by the grade earned with the deferred final.

Statement on Accommodations:

To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor and the Disability Resources Educational Services (DRES) as soon as possible. To contact DRES you may visit 1207 S. Oak Street, Champaign, call 333-4603 (V/TTY), or email a message to disability@uiuc.edu.

Academic Integrity:

"The University has the responsibility for maintaining academic integrity so as to protect the quality of education and research on our campus and to protect those who depend upon our integrity.

Expectations of Students:

It is the responsibility of each student to refrain from infractions of academic integrity, from conduct that may lead to suspicion of such infractions, and from conduct that aids others in such infractions. Students have been given notice of this Part by virtue of its publication. Regardless of whether a student has actually read this Part, a student is charged with knowledge of it. Ignorance is not a defense."

Readings:

Anderson and Libecap. (2014) *Environmental Markets*. Cambridge University Press.

Coase, R. (1960) The Problem of Social Cost. *Journal of Law and Economics*.

Hayek, H. A. (1945) The Use of Knowledge in Society. *American Economic Review*.

Lomborg, B. (2001). *The Skeptical Environmentalist*. Cambridge University Press.

Mankiw, N. G. (2009). Smart Taxes: An Open Invitation to Join the Pigou Club. *Eastern Economic Journal*.

Yandle, B. (1999) Baptists and Bootleggers in Retrospect. *Regulation*.

Course Schedule:

Day	Date	Topic	Lesson	Assignment Due
T	28-Aug	Introduction	1	
TH	30-Aug	Static Efficiency; Comparative Statics	2	
T	4-Sept	Taxes and Subsidies	2	
TH	6-Sept	Hayek Discussion	2	Hayek- The Use of Knowledge
T	11-Sept	Net Present Value	3	
TH	13-Sept	2-Period Non-Renewable Resource Optimal Extraction	3	Static Efficiency Problem Set
T	18-Sept	Renewable Resource Extraction	3	
TH	20-Sept	Externalities	4	Net Present Value Problem Set
T	25-Sept	Externalities	4	
TH	27-Sept	Midterm Exam 1		Externalities Problem Set
T	2-Oct	Pigovian Taxes	5	
TH	4-Oct	Pigovian Taxes in Practice	5	Mankiw- Smart Taxes
T	9-Oct	Pigovian Subsidies	5	
TH	11-Oct	Property Rights versus Open Access	6	Pigovian Tax Problem Set
T	16-Oct	Ownership as a Solution	6	
TH	18-Oct	Coase Theorem	6	Coase- The Problem of Social Cost
T	23-Oct	Common Law and Community Rules	6	
TH	25-Oct	Class Canceled		
T	30-Oct	Common Law in Practice	6	Anderson and Libecamp CH 1-3
TH	1-Nov	Midterm Exam 2		
T	6-Nov	Tradeable Permits	7	
TH	8-Nov	Tradeable Permits in Practice	7	Anderson and Libecamp CH 4-6
T	13-Nov	Command and Control	8	Tradeable Permit Problem Set
TH	15-Nov	Command and Control in Practice	8	
Fall Break				
T	27-Nov	Government Failure	9	Yandel- Baptists and Bootleggers in Retrospect
TH	29-Nov	Comparing Effectiveness of Regulations	9	
T	4-Dec	Comparing Effectiveness of Regulations	9	Anderson and Libecamp CH 7 and 8
TH	6-Dec	Recycling	10	
T	11-Dec	Sustainability	10	Data Project Due
W	19-Dec	Final Exam* 8:00 AM to 11:00 AM		

*Final Exam Date and time subject to the schedule set by the Registrar's Office. Check Course Explorer for official date and time.