ENVS 141: Ecological Economics
Fall 2019
Tues/Thurs 11:40am – 1.15pm, ISB 221

Instructor
Prof. Adam Millard-Ball
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Office: ISB 459
Office Hours: Normally Thursdays 1.30-3.30
Sign up for an appointment here: https://goo.gl/X7vFOD

Course Description

This course provides an introduction to economic frameworks for analyzing environmental issues. We will cover perspectives from both ecological economics, which sees the economy as one part of the ecological system; and environmental economics, which is more closely aligned with neoclassical economics.

Students should be familiar with basic economics, e.g. through Economics 1. Concepts of supply and demand, consumer surplus and marginal vs. average costs and benefits are particularly important to review before the course begins.

Course Goals

After completing this course, you should be able to:

- Use economic logic to discuss environmental problems and policy alternatives
- Apply conventional economic approaches to analyze environmental issues
- Appreciate the limitations of economics-based tools in understanding and solving environmental problems
- Critically assess the merits of environmental policy proposals, and participate in debates on the economics of environmental protection
- Understand the root causes of many disagreements between economists and ecologists

Texts

We will use the following textbook. It is available (free) as an e-book through the UCSC library, and is in stock in the Bay Tree Bookstore. Make sure you get the 2nd edition.

> Nathaniel Keohane and Sheila Olmstead (2016), *Markets and the Environment*. 2nd edition. Washington, DC: Island Press.

The readings from the following textbook are all optional, but may help with the more mathematical parts of the course. A copy is on reserve at McHenry Library.

> Jonathan Harris and Brian Roach (2013), *Environmental and Natural Resource Economics: A Contemporary Approach*. 3rd edition. Boston: Houghton Mifflin.

Other required readings will be posted on Canvas. In addition to those listed in the schedule, additional readings (mainly shorter articles) will be assigned as the quarter progresses.

Assessment

Short assignments / quizzes	15%	Due: various dates
Policy brief	20%	Draft due: November 19 Final due: November 27
Midterm exam	20%	October 31
Final exam	35%	December 11, 8-11am
Class participation	10%	

Short Assignments and quizzes

Short assignments and quizzes will be distributed 1-2 times per week. Some will check your understanding of online lectures, or invite you to provide a brief response to the readings. Others will focus on building your quantitative analysis skills, and some will require the use of a spreadsheet program such as Google Sheets or Excel. If you miss class for any reason, it is your responsibility to check Canvas to see if an assignment has been issued.

Policy Brief

You will write a 3- to 5-page policy brief aimed at a legislator or other decision-maker, providing economic analysis of an environmental issue. In class, you will peer-review another student's draft brief, and make revisions based on comments received.

Midterm and Final Exam

Questions on the midterm and final exams may address any of the material in the course, including readings and lectures. You are expected to listen actively and take notes in class. If you miss a class, please talk with another student. All slides will be posted on Canvas, but the slides are usually supplementary and will only cover a small part of the content discussed in class. Some classes may have no associated slides.

Section

Note that there is no section or TA for this course.

Class Schedule

The following schedule is subject to change. Any updates will be posted on Canvas. K&O refers to the textbook (by Keohane and Olmstead) for the course.

Note that I will provide online lectures for some classes, which help us free up class time for discussion and other learning activities. These must be viewed BEFORE class.

Class	Topic	Required Readings
Sep 26	Introduction. How economists see the environment	
Oct 1	The vision of the free market, and when it fails Externalities and "efficient" pollution	K&O Ch 2 (pp 11-30), Ch 4, Ch 5 (pp 80-84) Optional: Harris Ch. 3, pp 35-46 + appendices
Oct 3	Regulating pollution: the Coase Theorem	K&O Ch 8 (pp 139-143) Cowen blog post and linked article Optional: Harris Ch. 3, pp 46-54
Oct 8	Regulating pollution: taxes and trading	K&O Ch 8 (pp 144-167), Ch 9 Optional: Harris Ch. 16

Class	Topic	Required Readings
Oct 10	Cap-and-trade and environmental justice	K&O Ch 10 Brown 2018 Calma 2018 Cushing et al. 2018
Oct 15	Regulating pollution: fuel economy standards Which approach is best?	Jacobsen 2019 Popovich 2019 Goulder and Parry 2008 The Economist 2017
Oct 17	Property rights and common pool resources	K&O Ch 5 (pp 85-98), Ch 7 (128-138) Optional: Harris Ch. 4 and Ch. 13
Oct 22	Fishbanks simulation	Watch the video (36 mins): link on Canvas
Oct 24	Managing the commons (i): Fisheries	Birkenbach et al. 2017 Ostrom et al. 1999 Harford 2013
Oct 29	Managing the commons (ii): Water The global climate	Fleck 2016, Ch 6 Ostrom 2010
Oct 31	**Midterm exam**	
Nov 5	Valuing the environment I: Principles	K&O Ch 3 Pemberton & Kerr 2013 Kling, Phaneuf & Zhao 2012 Optional: Harris Ch. 6
Nov 7	Valuing the environment I: Examples *Don't forget to vote!*	Bishop 2017 Haab 2018
Nov 12	Discounting and intergenerational equity	K&O Ch 2 (pp 31-33) Nordhaus 2007 Stern and Taylor 2007 Mooney 2017
Nov 14	Cost-benefit analysis	Sunstein 2005 Kotchen 2018 Aldy 2018
Nov 19	Peer review of policy brief **(draft due in class)**	
Nov 21	Green jobs or green job killers?	Dechezleprêtre and Sato 2017 Semuels 2017 Borenstein 2015 Campbell 2017
Nov 26	National accounting: what GDP leaves out	K&O Ch 11 Constanza 2014 Radford 2013 Ch 11 Kubiszewski 2013 (skim) Optional: Harris Ch. 8
Nov 27	**Final policy brief due by 6 PM**	
Nov 28	No class – Thanksgiving	
Dec 3	Economic growth and wellbeing	Barrington-Leigh 2017 Radford 2013 Ch 12
Dec 5	Sustainability from an economic perspective A steady-state economy?	Solow 1991 Daly 2010 Daly 2005 and response Optional: Harris Ch. 7
Dec 11	**Final exam (8-11am)**	

Late Submission of Assignments

I know that life happens. If you have a reason for special consideration, you can request an extension BEFORE an assignment is due. Except in exceptional circumstances, no requests will be considered the day that an assignment is due.

Ten percent will be deducted for every 24-hour period a piece of assessment is late. The first 24-hour period starts at the time the piece was due (e.g. if you submit something at 5.30pm when it was due at 5pm, that equates to a 10% deduction).

Accessibility and Disabilities

If you qualify for classroom accommodations because of a disability, please submit an Accommodation Authorization from the Disability Resource Center (DRC) to Prof. Millard-Ball **within the first two weeks of the quarter**. You may submit these outside of class (e.g., office hours) to ensure anonymity. Contact DRC at 831-459-2089 (voice), 831-459-4806 (TTY), or http://drc.ucsc.edu for more information on the requirements or process.

Academic Integrity

Students are expected to adhere to the UCSC policy on academic integrity - http://www.ucsc.edu/academics/academic_integrity/. Unless otherwise stated in writing, all assignments should be written individually and be original works for this class. All academic integrity violations (e.g. plagiarism, cheating, multiple submissions, facilitating dishonesty) will be prosecuted if encountered. Please talk with the professor IN ADVANCE if you are unsure about citation styles or what may violate the academic integrity policy.