

ADELPHI UNIVERSITY

Robert B. Willumstad School of Business

Course Number: 203-215-001 Environmental
Economics
Meeting Days & Times: Tues and Thurs, 10:50-12:05
Fall 2019
Classroom: Nexus, Room 158

Professor: Mariano Torras, Ph.D.
Office: Room 306, Hagedorn Hall
Phone: (516) 877-4644
Fax: (516) 877-4607
Email: torrasm@adelphi.edu

Office Hours: Tuesday, 1:30-2:00; Wednesday, 1:20-3:00; Thursday, 1:30-2:00

Required Text: Harris, J., and B. Roach, *Environmental and Natural Resource Economics: A Contemporary Approach*, 4th edition, Routledge, 2018.

Recommended Texts: Beckerman, W. *Economics as Applied Ethics*, Palgrave Macmillan, 2011.
Lennox, E., J. Harris, and A. Codur, *Macroeconomics and the Environment*, Global Development and Environment Institute, 2019.
Roach, B., E. Lennox, and A. Codur, *Microeconomics and the Environment*, Global Development and Environment Institute, 2019.

Other Readings: Select articles to be distributed or posted on Moodle

Prerequisites: ECA 111 (Price System) and ECA 112 (National Economy)

Course Description: An examination of economic issues related to the natural world. Questions of theory, institution, measurement, and policy are addressed. Topics include the market analysis of public goods, the tragedy of the commons, green GDP, economic sustainability, and cost-benefit analysis. Much of the discussion centers on the competing views of neoclassical and ecological economics. Real world issues to be reviewed include resource and energy scarcity, global warming, food and water.

Grading: **Class work:** I expect you to come to class and to be on time. Please use the course outline as a guide to where we are in the semester so that you may keep ahead of the readings and contribute to class discussion on a regular basis. Posting on Moodle of chapter slides is meant as a study aid. Class participation figures heavily.

Problem sets: I will assign three problem sets during the semester, each of which you will have one week to complete. You may handwrite your answers (instead of typing) only if you are confident that your handwriting is moderately legible and your graphs or diagrams are neat, presentable, and precise (to scale!). Make sure that you have each assignment completed by the *beginning* of the class in which it is due and that the pages are stapled or otherwise fastened. *Late/emailed submissions and unfastened pages will suffer point deductions.* I

will allow up to one “re-do” for each, which means that if you are not satisfied with your grade you may submit an improved version of the assignment. The maximum grade for the re-do is the midpoint between an A and your original grade.

Discussion paper: You must submit a 12-15 page paper responding to the question “What does the environment have to do with economics?” Complete citation of sources is required, and at least seven of them must be “non-internet” sources – i.e., books or print articles. I will be providing a list of potential sources, none of which will be required. Same rule as with the problem sets – i.e., one re-do permitted. The paper must be turned in on the day of the final exam *at the latest*, although you may consult with me as needed over the course of the semester.

Exams: I will conduct only one in-class examination of your knowledge during the semester, which will be the final exam. It will consist of a set of short essay questions, among which you will have some choice. I place strong emphasis on general understanding of main themes and critical reasoning ability. Memorization of specific details will count for very little. The exam will be held in this same classroom on December 17th, at 10:30am.

Calculation of final grade: The problem sets are each worth 10% of the final grade, and the paper is worth 15%. The final exam is worth 30%, and classwork counts for the remaining 25%. Please note that **there will be *no* extra credit assignments.**

Course Outline

Dates	Topic	Readings
8/27-8/29	Introduction	Harris and Roach, Chapters 1 & 2; Nadeau, Summers
9/3-9/5	Ethics and welfare economics	Beckerman, Chapters 1-3 (on reserve)
9/10-9/17	Efficiency and externalities	Harris and Roach, Chapter 3; Leonhardt
9/19-9/26	Common property and public goods	Harris and Roach, Chapter 4; Hardin
10/1-10/3	Natural resource and environmental valuation	Harris and Roach, Chapter 6; Costanza et al.
10/8-10/15	Cost-benefit analysis	Harris and Roach, Chapter 7
10/17-10/24	Ecological economics	Harris and Roach, Chapter 9; Daly; Davidson
10/29-11/7	Income and welfare accounting	Harris and Roach, Chapter 10; Repetto
11/12-11/19	Energy: The great transition	Harris and Roach, Chapter 11; Webber
11/21-12/5	Climate change: Science, ethics, and policy	Harris and Roach, Chapters 12 and 13; Broome; Socolow & Pacala
12/17	Final Exam – 10:30AM	All assigned readings

Reading List

- Beckerman, W.** (2011). *Economics as Applied Ethics*, Palgrave Macmillan.
- Broome, J.** (2008). The ethics of climate change. *Scientific American*, June 2008, 96-102.
- Costanza, R., R. d'Arge, R. de Groot, S. Farber, M. Grasso, B. Hannon, K. Limburg, S. Naeem, R. V. O'Neill, J. Paruelo, R. G. Raskin, P. Sutton, and M. van den Belt** (1997). The value of the world's ecosystem services and natural capital. *Nature*, 387 (15 May 1997), 253-260.
- Daly, H.** (1996). *Beyond Growth: The Economics of Sustainable Development*, Beacon.
- Davidson, C.** (2000). Economic growth and the environment: Alternatives to the limits paradigm. *Bioscience* 50(5): 433-440.
- Hardin, G.** (1968). Tragedy of the commons. *Science*, 13 December, pp. 1243-1248.
- Harris, J., and B. Roach** (2018). *Environmental and Natural Resource Economics: A Contemporary Approach*, 4th edition, Routledge.
- Lennox, E., J. Harris, and A. Codur** (2019). *Macroeconomics and the Environment*, Global Development and Environment Institute.
- Leonhardt, H.** (2014). Efficiency reconsidered: A social ecological economics approach. Winner of Marg Blaug Student Essay Prize, Vienna University of Economics and Business, Austria.
- Nadeau, R.** (2008). The economist has no clothes. *Scientific American*, April 2008, 42.
- Repetto, R.** (1989). Nature's resources as productive assets. *Challenge*, 32(5): 16-20.
- Roach, B., E. Lennox, and A. Codur** (2019). *Microeconomics and the Environment*, Global Development and Environment Institute.
- Socolow, R., and S. Pacala** (2006). A plan to keep carbon in check. *Scientific American*, September 2006, 50-57.
- Summers, L.** (1992). Let them eat pollution. *The Economist*. February 8th, 1992.
- Webber, M.** (2015). Energy + water + food equals a puzzle for the planet. *Scientific American*, February 2015, 63-67.