

Resource Economics 263 Natural Resource Economics

Class meetings Tuesday and Thursday, 2:30 - 3:45 pm, Integrated Learning Center S331

Professor John Stranlund, <https://www.umass.edu/resec/people/stranlund>
Office hours: Wednesdays 9:00 – 10:30, 222 Stockbridge Hall
Contact: stranlund@resecon.umass.edu

Teaching Assistant Manuel Estay Montecinos
Office hours: Wednesdays 4:00 – 6:00, 124 Stockbridge Hall (subject to change)
Contact: mestay@umass.edu

Course Objective: Resource Economics 263 is an introductory course in natural resource economics. Its purpose is to examine how economic analysis helps us understand the problems of natural resource management. We will spend the first weeks of the course reviewing the relevant economic concepts and then apply these to problems associated with nonrenewable resources, energy, forests, fisheries, and biodiversity.

This is a general education course with a Social and Behavioral Science designation. As a general education course, our goal is to address fundamental ideas and methods of analysis in economics and apply them to the study of natural resource use and management.

There are no prerequisites for this course.

Grades

Three midterms, 75% Midterm exams are worth 25% each. They will be given in class on October 3, November 7, and the scheduled period during finals week. The last midterm is not cumulative. No makeup will be given for any exam except in extraordinary circumstances. In particular, do not plan on leaving campus before the final.

Problem sets, 25% There will be eight assignments and we will count your best six scores. Problem sets are always due on Thursday during class. If you can't come to class when a problem set is due, it must be submitted by 4 pm on the due date to Professor Stranlund in his office. No late assignments will be accepted.

Your grade will be determined based only on the above—there are no extra credit opportunities. Final grades will be determined by the following minimum grade cutoff points based on your percentage of the total points available: A = 90, A– = 87, B+ = 83, B = 80, B– = 77, C+ = 73, C = 70, C– = 67, D+ = 63, D = 60 and F < 60.

While you are free to discuss assignments with your colleagues, I expect the writing and reasoning in your work to be your own. If I find that you have cheated on a problem set or an exam, I will pursue the matter to the fullest extent possible under the University's Academic Honesty Policy.

Required reading: The required text for this course is Barry Field's, *Natural Resource Economics: An Introduction*, Third Edition, Waveland Press, 2016. (The second edition can be used).

My lectures will be posted in MOODLE. You should treat these as part of the required reading for the course. I recommend that you bring to class the notes that we will be discussing that day. Additional readings, lectures, and other items will also be posted in MOODLE. You will be tested on this additional material.

Here are some websites you might find interesting. There are many others.

The Conversation (Environment + Energy), <https://theconversation.com/us/environment>

Energy Institute at Haas Blog, <https://energyathaas.wordpress.com/>

Environmental Economics, <http://www.env-econ.net/>

Resources for the Future, <http://www.rff.org/home>

Common Resources, <http://www.rff.org/blog>

Resource Radio (podcasts), <https://www.resourcesmag.org/resources-radio/>

Mongabay, <http://www.mongabay.com/>

Course Schedule and Reading List (Subject to change)

<p>Week 1 Tues. 9/3 Thurs. 9/5</p>	<p>Introduction (Field Chapters 1 and 2)</p> <p>“Making Policy in an Uncertain World.” Energy Institute at Haas Blog. August 2017.</p> <p>Problem set 1 assigned: Due 9/12</p>
<p>Week 2 Tues. 9/10 Thurs. 9/12</p>	<p>Benefits and Costs, Supply and Demand (Field Chapters 3 and 4)</p> <p>“Ecuador approves Yasuni national park for oil drilling” The Guardian. August 16, 2013.</p> <p>Problem set 2 assigned: Due 9/19</p>
<p>Week 3 Tues. 9/17 Thurs. 9/19</p>	<p>Efficiency and Sustainability, Markets and Efficiency (Field Chapters 5 and 6)</p> <p>Climate Change (PPT slides)</p> <p>“What’s Really Warming the World?” Bloomberg Business, June 24 2014. http://www.bloomberg.com/graphics/2015-whats-warming-the-world/</p> <p>Problem set 3 assigned: Due 9/26</p>

Week 4 Tues. 9/24 Thurs. 9/26	Public Policy for Natural Resources (Field Chapter 7) “Will Peak Oil or Renewables Make Climate Change Moot?” Conversable Economist. February 12, 2016.
Week 5 Tues. 10/1 Thurs. 10/3	Nonrenewable Resources (Field Chapter 10) Exam 1: 10/3
Week 6 Tues. 10/8 Thurs. 10/10	Nonrenewable Resources, continued (Field Chapter 10) No class Tues. 10/8, Monday schedule TBA: The IPCC’s new report on climate change and land use (Aug. 2019) Problem set 4 assigned: Due 10/17
Week 7 Tues. 10/15 Thurs. 10/17	Energy (Field Chapter 11) Additional reading TBA Problem set 5 assigned: Due 10/24
Week 8 Tues. 10/22 Thurs. 10/24	Marine Resources (Field Chapter 13) “Unassessed Fisheries.” Sustainable Fisheries Group, Bren School of Environmental Management, UC-Santa Barbara. A Guide to Plastic in the Ocean. https://oceanservice.noaa.gov/hazards/marinedebris/plastics-in-the-ocean.html Problem set 6 assigned: Due 10/31

Week 9 Tues. 10/29 Thurs. 10/31	Forest Economics (Field Chapter 12) “The state of US forests: Six questions answered.” The Conversation. April 19, 2017.
Week 10 Tues. 11/5 Thurs. 11/7	Forest Economics, continued (Field Chapter 12) Exam 2: Thursday, 11/7
Week 11 Wed. 11/12 Thurs. 11/14	Deforestation Amazon rain forest fires: here’s what’s really happening. New York Times, August 23, 2019. https://www.nytimes.com/2019/08/23/world/americas/amazon-fire-brazil-bolsonaro.html Problem set 7 assigned: Due 11/28
Week 12	Thanksgiving Holiday
Week 13 Tues. 11/26 Thurs. 11/28	Biodiversity (Field Chapter 19) TBA: Trump Administration changes to the Endangered Species Act (August 2019) Problem set 8 assigned: Due 12/5
Week 14 Tues. 12/3 Thurs. 12/5	Common pool resources “Tipping the scale: how a political economist could save the world’s forests.” Mongabay, May 29, 2014. (Article about the life and work of Lin Ostrom).
Week 15 Tues. 12/10	Common pool resources, continued Thurs. 12/10 is the last day of classes. Review for final exam
Finals Week 12/13 – 12/19	Exam 3: To be announced

Accommodation Statement

The University of Massachusetts Amherst is committed to providing an equal educational opportunity for all students. If you have a documented physical, psychological, or learning disability on file with Disability Services (DS), you may be eligible for reasonable academic accommodations to help you succeed in this course. If you have a documented disability that requires an accommodation, please notify me within the first two weeks of the semester so that we may make appropriate arrangements.

Academic Honesty Statement

Since the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required of all students at the University of Massachusetts Amherst. Academic dishonesty is prohibited in all programs of the University. Academic dishonesty includes but is not limited to: cheating, fabrication, plagiarism, and facilitating dishonesty. Appropriate sanctions may be imposed on any student who has committed an act of academic dishonesty. Instructors should take reasonable steps to address academic misconduct. Any person who has reason to believe that a student has committed academic dishonesty should bring such information to the attention of the appropriate course instructor as soon as possible. Instances of academic dishonesty not related to a specific course should be brought to the attention of the appropriate department Head or Chair. Since students are expected to be familiar with this policy and the commonly accepted standards of academic integrity, ignorance of such standards is not normally sufficient evidence of lack of intent (http://www.umass.edu/dean_students/codeofconduct/acadhonesty/).