

ECON 373: Natural Resource Economics

Welcome to ECON 373! The most pressing social problem we face today concerns the interaction between people and planet. Resource economics introduces natural and biological restrictions into the exploration of how to optimally manage Earth's complex and finite resources: what should we consume now and what should we conserve for the future? We will analyze how natural resources should be used, how they are used in reality, and what policies may align these cases. By the end of this course you will:

1. Analyze the general (economic) conditions of domestic and international natural resource markets, such as those for non-fuel minerals, oil, water, land, forest, and fish.
2. Apply dynamic optimization methods (in which actions taken today affect the future) to natural resource management problems.
3. Evaluate how different market and institutional structures, as well as public policy, influence resource management.

Lecture: TuTh 12:30-2p, 2122 Sheridan Room 250

Office Hours: Th 9-10a and F 10-11a (or by appointment), KGH 3485

Website

The course website is on Canvas. Everyone should be automatically enrolled in the Canvas website upon official enrollment in the course. Readings, problem sets, solutions and other materials will be posted on the website, in addition to any announcements made in lecture. Check your Canvas settings and make sure you receive emails about class announcements.

Prerequisites

The prerequisites for this course are 310-1, 310-2 (Intermediate Microeconomics I and II) and 281 (Econometrics). You will also be responsible for math skills including algebra, calculus, and interpreting graphs.

Required and Recommended Readings

All required readings will be posted on Canvas. If you're looking for a textbook as a reference guide in addition to the notes, the following book is recommended *but not required*: Nathaniel Keohane and Sheila Olmstead: [Markets and the Environment](#), 2016.

Responsibilities

I will come to class prepared; respond to and encourage questions; oversee accurate and fair grading of problem sets and exams; be available during office hours and scheduled appointments; stimulate enthusiasm for economics and learning in general. As a student in this class, your responsibilities are:

1. Attend class, having completed the assigned readings.
2. Actively participate through discussions and group activities.
3. Complete all assignments before they are due.
4. Midterm: Thursday February 7, in-class.
5. Final: Monday, March 18, 3-5p.

How meeting each of these responsibilities will affect your grade in this class is described in more detail below. Please check the exam dates and make sure you are able to attend them. No make up exams will be offered.

Grades

Assignment	Date	Percentage of Final Grade
Attendance and Participation	Throughout quarter	5
Homework	Throughout quarter	15
Midterm Exam	2/7	35
Final Exam	3/18	45

Attendance and Participation

I will be grading your attendance by giving short quizzes during lecture about the readings and/or material from previous lectures. This is to incentivize you to complete the readings before coming to class and to study the material throughout the semester rather than in a crunch at exam time. In general, the questions will be fairly shallow and are not meant to be a huge stressor. No make-up quizzes will be given.

Your participation will be determined by your engagement: speaking and listening during class, office hours, or digitally! Note: I get that speaking in class can be nerve-racking and I will do my best to make it less painful. If you are concerned about your participation grade due to shyness, please make an appointment with me to discuss options.

Problem Sets

You will complete problem sets on Crowdmark over the course of the quarter. These questions will be based on recently covered course material and will be good practice for the exams. Late problem sets will be penalized by a letter grade for every 24hr increment they are late.¹

Exams

There will be one midterm exam during the quarter and one cumulative final exam. No cheat-sheets will be allowed, though I encourage you to make yourself one as you study! Please check the exam dates above and make sure you can attend them. There will be no make-up exams given. In the unfortunate event that you miss the midterm for an excused reason, you must contact me by email or phone by 6pm (central time) and have written certificate from a medical/legal authority justifying the reason. Then you will complete the exam as a take home test due next class. If the exam is graded and found to be of A-quality, then your final exam will count for 80% of the total grade and the midterm will count for 0% (homework 15%, participation 5%). If the exam is graded and found to be less than A quality, then your midterm exam score will be zero.

If you are absent from the final exam due to an excused reason, you must have taken the midterm and have a course grade of at least 60% to qualify for an incomplete grade of X. Your course grade will be determined by whichever is **lower**: (1) $5\% \times \text{Participation} + 15\% \times \text{Homework} + 35\% \times \text{Midterm} + 50\% \times \text{Make-up Final}$, (2) $100\% \times \text{Homework}$, or (3) $100\% \times \text{Make-up Final Exam}$.

You would have to provide documentation to the Office of Undergraduate Studies and Advising (OUSA) and gain their approval to take a makeup exam in the following quarter. If you do not take the final exam and do not qualify for an incomplete or your absence is not excused, then your final exam score will be zero.

Course Policies

Cellphone and Laptop Policy

Except in the case of demonstrated necessity or class activity, there will be no computers, cellphones, tablets

¹A problem set due Wednesday, Feb 25th at 12pm and turned in on Wednesday, Feb 25th at 12:01pm may earn a maximum of 90% of the possible points; if turned in on Thursday, Feb 26th at 12:01pm, it may earn a maximum of 80% of the possible points.

or other mobile communication devices used during the lectures. Devices must remain in your bag, not on your desk or lap, etc. All devices should be silenced, and students may not receive phone calls, wander the internet, or send/receive messages during class. [It's better for your learning](#) to take notes the old fashioned way and is much less distracting to the people around you!

Regrade Policy

If you believe there was a mistake in the grading of an assignment/exam, you will need to write a statement (about half a page) explaining, staple this to the assignment/exam, and submit it in hardcopy to me during the lecture immediately following the return of the assignment/exam so we can resolve it immediately. No changes to scores will be made without following this procedure and I will regrade the entire assignment/exam. This should encourage you to pick up your work promptly and check both your answers and the grading! However, note that because the whole exam will be regraded, your score may go up or down as a result of the regrade.

Email Policy

Any email you send me should contain "ECON 373:" plus a descriptor in the subject line so that I can identify it and respond in a timely manner. I will respond within 48 hours. Email is a good way to communicate with me about most logistical issues and some questions about course material. Include a tentative answer for any questions sent by email. This will help me find where you are confused and permit shorter/more helpful responses. *I will not guarantee answers to content questions via email sent after 9pm the day before an exam or 3 hrs before an assignment is due.* This is to (1) discourage you from waiting till the last minute to start an assignment or study for a test, and (2) give me a window to respond to your questions in time for them to actually be useful for you before the deadline!

Academic Honesty

In fairness to students who put in an honest effort, I take plagiarism of other students' work and other forms of academic dishonesty **very seriously**, and all cases involving suspected violation of the academic integrity guidelines will be referred immediately to the dean's office of Weinberg College. Any academic integrity violation will result in a score of zero on that assignment or exam and can result in an F for the course. It is your responsibility to inform yourself of campus policies regarding academic misconduct, which can be found here: <http://www.weinberg.northwestern.edu/handbook/integrity/>

Do your own work. Study groups are encouraged for assignments and exam review, and to discuss general ideas related to the class, but all submitted work should be written individually in *your own words*. This means that you should not share any computer files, or your answers, or seek (provide) assistance from (to) other students on what you are required to do individually. *If in doubt about something, ask me. I recommend writing up your answers in a separate location from your study group.*

Accommodations

Any student requesting accommodations related to a disability or other condition is required to register with AccessibleNU (accessiblenu@northwestern.edu; 847-467-5530) and provide me with an accommodation notification from AccessibleNU, preferably within the first two weeks of class. If you have emergency medical information you wish to share with me, or if you need special arrangements in case the building must be evacuated, inform me immediately. Please see me privately after class or during office hours. Anything discussed will remain confidential.

Looking forward to spending the quarter with you all!