

**Economics 4535**  
**Natural Resource Economics**  
**Fall 2016**

**Instructor:** Billy Mertens  
**Office:** ECON 12  
**E-mail:** [mertens@colorado.edu](mailto:mertens@colorado.edu)  
**Web:** <https://learn.colorado.edu/>  
**Office Hours:** M 9:15 – 9:45, 11:00 – 11:40 & 2 – 4pm; W,F 11 – 11:40am.

**Course Description**

This course is designed to give you an introduction to the implications of natural resources as economic concepts. It presents theories of efficient utilization of natural resources and discusses issues related to current practices of use of resources. We will study natural resources used in the economy, the value of natural resources to society, and the allocation of renewable and non-renewable resources. We also discuss issues of sustainability, conservation, and preservation. The course extensively uses graphical analyses and some mathematical models. In addition to learning about the methods that economists use to analyze natural resource problems and issues, you will be challenged to frame problems in economic terms and propose solutions to these problems.

A much more detailed outline of covered material is posted separately.

**Prerequisites**

Students must have completed ECON 1078, 1088, 2010, 2020, 3070 and 3818. I assume that you did not only take the class, but also that you understand and remember the content. It is **very** important that you fulfill the prerequisite **before** you take this course, and **still** understand the materials in the prerequisite. If you have any uncertainty as to whether you are under or over qualified to take the course, please talk to me ASAP. The prerequisites must be strictly enforced.

I will use calculus in the course. Materials learned in 3070 will form a foundation for what we will do in 4535. I will cover the relevant micro theory in my lectures, but cover it more quickly than when it was presented to you in intermediate microeconomic theory. It is important that you have successfully completed Intermediate Micro Theory. If you are an environmental studies major who has doubts about their knowledge of economics, talk to me—soon.

While this is not a micro-theory course, economics without theory is not economics. You will need micro theory to understand and explain the allocation of natural resources. Some of the theory and terms you will need to know include: the  $\text{Pareto frontier}$ , the  $\text{contract curve}$ ,  $\text{Coase's theorem}$ , when the market equilibrium will and won't be efficient,  $\text{externality}$ , types of market failures, corrections for market failure,  $\text{ Pigou tax}$  and  $\text{Coase's theorem}$ ,  $\text{property rights}$ ,  $\text{common-pool resources}$ ,  $\text{tragedy of the commons}$ ,  $\text{open access}$ ,  $\text{usufruct}$ ,  $\text{usufructuary}$ ,  $\text{usufructuary's right}$ ,  $\text{usufructuary's duty}$ ,  $\text{usufructuary's liability}$ ,  $\text{usufructuary's obligation}$ ,  $\text{usufructuary's responsibility}$ ,  $\text{usufructuary's accountability}$ ,  $\text{usufructuary's answerability}$ ,  $\text{usufructuary's liability}$ ,  $\text{usufructuary's obligation}$ ,  $\text{usufructuary's responsibility}$ ,  $\text{usufructuary's accountability}$ ,  $\text{usufructuary's answerability}$ .

**Policy on Cheating**

**If you are found to have violated the honor code (see below), by both the honor code council and myself, you will automatically fail the course!**

La , ab , a d ca ac a a a a d b a a  
c a . T a a a d c a c a d c d c d c a  
d. H , a b c ab da c a a d c a a d ac  
a a a a d (b a ) a . I add , a b a d a ac a b  
b c a a a a ab . T

explanation are most effective.

**Final Exam Conflicts**

Official University Policy states that: If you have three or more final exams scheduled on the same day, you are entitled to arrange an alternative exam time for the last exam or exams scheduled on that day. To qualify for rescheduling final exam times, you must provide evidence that you have three or more exams on the same day, and arrangements must be made with your instructor no later than the end of the tenth week of the semester. **It is highly unlikely that our final will be the third exam on the day of our final, so it is highly unlikely that any alternate exams will be offered.**

**Group-Led Article Discussions, Quizzes and Participation**

We will review several relevant academic articles on different issues in natural resource economics. You will be required to understand these articles, and you will work in teams of 3-5 people to present

## Grading

Group Assignments	6%
Group-Led Discussion	10%
Quizzes (and Participation)	15%
Exam I	20%
Exam II	23%
Final Exam	26%

## Incompletes, Extra Credit, etc.

I adhere strictly to the University guidelines on Incompletes (“An I is given only when students, \_\_\_\_\_, have been unable to complete course requirements. A substantial amount of work must have been \_\_\_\_\_ before approval for such a grade is completed.”). Bad grades, unsatisfactory performance, too many credit hours, work conflicts, etc. are not reasons for an incomplete.

**I am adamant about giving each student an equal opportunity to perform well in the course, so there will be no extra credit opportunities that are not offered to the entire class. You should focus your efforts on learning the material and doing well on the exams.**

Your Score	Grade
92% to 100%	A
90% to 91%	A-
88% to 89%	B+
82% to 87%	B
80% to 81%	B-
78% to 79%	C+
72% to 77%	C
70% to 71%	C-
68% to 69%	D+
62% to 67%	D
60% to 61%	D-
Below 59.5%	F

## Additional Notes

All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, and of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the Honor Code Council ([honor@colorado.edu](mailto:honor@colorado.edu); 303-725-2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Additional information on the Honor Code can be found at <http://www.colorado.edu/policies/honor.html> and at <http://www.colorado.edu/academics/honorcode>

If you qualify for accommodations because of a disability, please submit to your professor a letter from Disability Services in a timely manner (for exam accommodations provide your letter at least one week prior to the exam) so that your needs can be addressed. Disability Services determines

A reply from one student to another on the discussion board for one of my colleague's online classes: "If you read the course syllabus you will find the answer to your questions. If you do not understand what you read I recommend you read multiple times. After reading the syllabus if you still have questions come back and I will try to help you as much as possible."