

Econ 480. Intermediate Environmental and Resource Economics
Department of Economics, Iowa State University

Syllabus

Instructor: Professor Dave Keiser

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Office: 468F Heady Hall

Office Hours: Wednesdays 10:30am – 12:30pm

Class Lectures: TR 2:10PM – 3:25PM; Carver 0294

Credit Hours: 3

Course Description:

Catalog Description

Theories of natural resource utilization and allocation. Externalities, public goods, and environmental quality. Renewable energy, biofuels, land use change and life cycle analysis of carbon, and sustainability and resource conservation. Methodologies for analyzing natural resource and environmental problems and evaluating resource policies.

Prerequisites

Econ 301 (Intermediate Microeconomics) or Econ 501 (Graduate Microeconomics)

Course Requirements and Grading:

Students are expected to attend normal class time lectures for the entire semester. In addition, students are expected to complete regular weekly reading assignments, homework assignments, and three tests. This work outside of class is typically six hours per week. Grading for the class will be as follows:

- Homework Assignments (weighted equally): 25%
- Test #1: 20%
- Test # 2: 25%
- Test # 3: 30%

I will use the following grading-scale:

- **A** : 94 – 100; **A-** : 90 – 93
- **B+** : 88 – 89; **B** : 84 – 87; **B-** : 80 – 83
- **C+** : 78 – 79; **C** : 74 – 77; **C-** : 70 – 73
- **D+** : 68 – 69; **D** : 64 – 67; **D-** : 60 – 63
- **F** : < 60

I encourage feedback throughout the semester to make sure my goals and your expectations are being met. I will distribute evaluations mid-semester.

Course Materials: We will make use of the following **required text** by Tietenberg and Lewis. I may also provide additional reading materials that include journal articles, technical reports, and other writings.

Tietenberg, Tom and Lynne Lewis. *Environmental and Natural Resource Economics*. 2018. Routledge, 11th edition.

Questions about Course Materials and Email Policy

I strongly encourage you to contact me before or after lecture or during office hours. I will make every attempt to respond promptly to questions through email, but I cannot guarantee that your questions will be resolved quickly. The best way to discuss any questions/concerns you may have is in person.

Electronic Devices in Class

I do not forbid the use of electronic devices in the classroom during normal lectures. However, these devices (laptops, tablets, smartphones, calculators, etc.) are **prohibited during the tests**. If a student's use of an electronic device is disruptive to teaching and/or learning, I will ask that the student discontinue the use of that device. Please be considerate of those around you.

Late Assignments and Absences

Assignments will not be accepted after their due date unless prior arrangements have been made with the instructor. You must contact me **in writing (email)** prior to the due date and time with an explanation as to why you request an extension. It will be up to my discretion to grant this extension. A similar policy holds for **all exams**.

Academic Integrity

This class will follow Iowa State University's policy on academic dishonesty. I will discuss any case of academic misconduct directly with the student and report the incident to the Dean of Students Office. Any academic misconduct will result in an F for the assignment.

Please familiarize yourself with Iowa State's academic misconduct policies here: <https://knowthecode.dso.iastate.edu/>

Accessibility

Iowa State University is committed to assuring that all educational activities are free from discrimination and harassment based on disability status. Students requesting accommodations for a documented disability are required to meet with staff in Student Accessibility Services (SAS) to establish eligibility and learn about related processes. Eligible students will be provided with a Notification Letter for each course and reasonable accommodations will be arranged after timely delivery of the Notification Letter to the instructor. Students are encouraged to deliver Notification Letters as early in the semester as possible. SAS, a unit in the Dean of Students Office, is located in room 1076, Student Services Building or online at www.sas.dso.iastate.edu. Contact SAS by email at accessibility@iastate.edu or by phone at 515-294-7220 for additional information.

Dead Week

This class follows the Iowa State University Dead Week policy as noted the ISU Policy Library; as well as section 10.6.4 of the Faculty Handbook. For more information, please see <http://www.provost.iastate.edu/academic-programs/dead-week>

Harassment and Discrimination

Iowa State University does not discriminate on the basis of race, color, age, ethnicity, religion, national origin, pregnancy, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. Veteran. Inquiries regarding nondiscrimination policies may be directed to Office of Equal Opportunity, 3410 Beardshear Hall, 515 Morrill Road, Ames, Iowa 50011, Tel. 515 294-7612, Hotline 515-294-1222, email eooffice@iastate.edu

Religious Accommodation

Iowa State University welcomes diversity of religious beliefs and practices, recognizing the contributions differing experiences and viewpoints can bring to the community. There may be times when an academic requirement conflicts with religious observances and practices. If that happens, students may request reasonable accommodation for religious practices. In all cases, you must put your request in writing. The instructor will review the situation in an effort to provide a reasonable accommodation when possible to do so without fundamentally altering a course. For students, you should first discuss the conflict and your requested accommodation with your professor at the earliest possible time. You or your instructor may also seek assistance from the Dean of Students Office (<http://dso.iastate.edu>) at 515-294-1020 or the Office of Equal Opportunity (<https://www.eoc.iastate.edu>) at 515-294-7612.

Key Dates (tentative)

Tuesday, August 21.....	Start of Class
Tuesday, September 18.....	Test #1
Tuesday, October 23.....	Test #2
November 19 – 23.....	No Class (Thanksgiving break)
Week of December 10 – 14 (Exact date per ISU Website).....	Final

Course Outline

Note: Required readings for the class are listed below. I will post regular homework assignments as well. Please note that our readings will jump around a bit in the textbook to cover environmental economics topics in the first half of the semester and natural resource economics topics in the second half of the course. I will try to stick to this schedule, but might deviate slightly to accommodate any extra time needed to cover course material.

Week 1: Course Goals and Foundations

Required Readings

Chapter 1: Visions of the Future

Chapter 2: The Economic Approach

Week 2: Benefit-Cost Analysis and Decision Making

Required Readings

Chapter 3: Evaluating Trade-Offs

Week 3: Valuing the Environment

Required Readings

Chapter 4: Valuing the Environment

Week 4: Dynamics

Required Readings

Chapter 5: Dynamic Efficiency and Sustainable Development

Week 5: Test 1 & Pollution Control

Required Readings

Chapter 14: Economics of Pollution Control

Week 6: Air Pollution

Required Readings

Chapter 15: Stationary-Source Air Pollution

Week 7: Water Pollution

Required Readings

Chapter 18: Water Pollution

Week 8: Toxic SubstancesRequired Readings

Chapter 19: Toxic Substances

Week 9: Climate ChangeRequired Readings

Chapter 17: Climate Change

Week 10: Test 2 & Depletable ResourcesRequired Readings

Chapter 6: Depletable Resources

Week 11: WaterRequired Readings

Chapter 9: Water

Week 12: LandRequired Readings

Chapter 10: Land

Week 13: ForestsRequired Readings

Chapter 11: Forests

Week 14: No Class (University Holiday)**Week 15: Fisheries**Required Readings

Chapter 12: Fisheries

Week 16: Review