



INTERMEDIATE ENVIRONMENTAL ECONOMICS
DEPARTMENT OF AGRICULTURAL AND APPLIED ECONOMICS (AAE 575)
COLLEGE OF AGRICULTURE AND LIFE SCIENCES

INSTRUCTOR

Prof. Craig Johnston
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Madison, WI 53706
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OFFICE HOURS

Wednesdays 3-4pm in my office, or by appointment.

CLASS WEBSITE

Learn@UW. Check regularly for announcements, readings, assignments, grades, etc.

CREDITS

Undergraduate students should enroll in this course for 4 credits, but graduate students are to enroll for 3 credits.

TEXT

Required Text: Kolstad, C. 2010. *Environmental Economics*. Oxford: Oxford University Press. 2nd Edition.

COURSE DESCRIPTION

This course builds upon introductory environmental economics (AAE 343) by providing a more rigorous numerical problem solving approach. Throughout the course, theoretical tools and empirical techniques necessary for understanding environmental economics will be analyzed at the advanced undergraduate level. The emphasis of this course is on the application of microeconomic principals to deepen students' understanding of (i) why resource and environmental problems have occurred from the economic point of view, and (ii) what kind of policy tools, which are provided by economics and management science, can usefully be implemented to solve these problems.

LEARNING GOALS

Students who successfully complete this course will be able to:

1. Identify and analyze the presence of different market failures that give rise to an inefficient use of environmental resources.
2. Analyze the impacts and the efficiency of different environmental policy instruments such as emissions trading, environmental taxes and emission limits.
3. Explain and critically evaluate the basics of methods designed to value environmental impacts and changes in economic terms as well as the limitations of such methods, and use this knowledge to conduct basic economic valuation studies.
4. Analyze and discuss the meaning of optimal use of different natural resources – renewable as well as non-renewable – and the causes of deviations from these criteria's.
5. Suggest and evaluate the impact of different policy measures designed to promote an efficient use of natural resources.

PREREQUISITES

ECON 301 (Intermediate Microeconomic Theory); AAE 343 (Environmental Economics).

ASSESSMENT AND GRADING POLICY

Student grades will be based on the following:

<i>ITEM</i>	<i>%</i>
Problem Sets	20%
Midterm # 1	25%
Midterm # 2	25%
Final Exam	30%

Final grades will be assessed in the following manner:

A: 94-100 B: 84-89 C: 72-79
AB: 89-94 BC: 79-84 D: 65-72 F: under 65

INSTRUCTOR'S EXPECTATIONS

You are expected to attend scheduled class, arrive on time, and complete problem sets on time. If you are unable to attend a lecture, it is your responsibility to catch up on material. You must provide me with credible notice of any absence from examinations at least one-week prior to the exam, otherwise a score of zero will be awarded. What is considered credible notice is up to the discretion of the professor, and any questions should be raised prior to the one-week notice period.

PRELIMINARY COURSE OUTLINE

Part 1: Why markets fail

How much environmental protection?
Market failure: public goods, public bads, externalities
Making decisions about environmental programs

Part 2: Regulating individuals and firms

Regulating pollution
Prices
Property rights
Spatial and temporal issues
Regulating polluters with unknown costs

Part 3: Demand and value for environmental goods

Demand for environmental goods
Hedonic price methods
Household production
Constructed markets

Part 4: Advanced topics

Risk and uncertainty
International competition
Mathematical programming related to environmental issues

UNIVERSITY OF WISCONSIN POLICIES AND EXPECTATIONS

Academic Honesty

In fairness to students who put in an honest effort, cheaters will be treated very strictly. Any evidence of cheating will result in a score of zero on the assignment. Incidences of cheating or plagiarism will be reported to the campus, which may administer additional punishment. Plagiarism includes appropriation of whole passages with or without credit, appropriation of words and phrases without credit, appropriation of both main and supporting ideas without credit, and paraphrasing without credit. Plagiarism also includes submitting a paper written by someone else. Ethical research requires that you properly document the sources you use. Even when you do not quote directly from another work, if reading that source contributed to the ideas presented in your paper, you must give the authors proper credit. If you are unsure of how to properly cite sources, ask me for guidance, or visit the Writing Center webpage:

<http://writing.wisc.edu/Handbook/QuotingSources.html>

For more information on academic misconduct, please visit:

<http://www.students.wisc.edu/doso/academic-integrity/>

Disability Access

The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. Students are expected to inform me of their need for instructional accommodations by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized. I, will work either directly with the you or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA. For more information on academic misconduct, please visit:

<http://mcburney.wisc.edu/facstaffother/faculty/syllabus.php>