



ECONOMICS OF ENVIRONMENTAL MANAGEMENT

AGEC/ENSC 4413 Spring Semester 2006

Meets: M-W-F 9:30-10:20 Room: 332 Agriculture Building

Instructor Information:

Dr. Jennie Popp, Agricultural Building Room 218B 479-575-2279 jhpopp@uark.edu

The Description of this Course Offered in the Catalog is:

An economic approach to problems of evaluating private and social benefits and costs of altering the environment. Emphasis is given to the interaction of individuals, institutions and technology in problems of establishing and maintaining acceptable levels of environmental quality.

Prerequisite: three hours of economic principles or consent

Each student who successfully completes this course will have developed the skill to apply microeconomic tools and concepts to environmental resource use, management, and policy. You will be able to distinguish circumstances that require a need for objective evaluation tools and those that require subjective evaluation tools. Finally you will have gained an awareness of environmental issues important in the state of Arkansas and in the nation and an understanding of economic and policy tools relevant in their evaluation.

The Course Will Be Broken into Four Sections:

1. Modeling Environmental Problems
2. Modeling Solutions to Environmental Problems
3. Analytic Tools for Environmental Planning
4. Case Studies of Regional Environmental Issues

The syllabus is subject to change based on students' interest and knowledge as well as speaker and site visit availability.

Office Hours:

Regular office hours for Dr. Popp are scheduled for Monday and Wednesday 10:30am to 12:00pm, or, you can call or email to schedule an appointment.

Course Home Page:

Material for this course, including syllabus, homeworks, and links to suggested reading materials can be found on webCT. You can reach webCT at <http://webct.uark.edu/> or <http://www.uark.edu/webct> Once enrolled in AGECE 4413/ENSC 4413, a student can click on "my courses" to gain access to all materials for 4413. Please let me know if you find any errors in this page or have any suggestions to make it more useful.

Grading:

Exam I & 2	40%
Homework /Quizzes	20%
Site Visit Case Study	20%
<u>Final Exam</u>	<u>20%</u>
Total	100%

No hats may be worn during a quiz or an exam. Please bring a ruler and a calculator to all quizzes/exams. Make up exams *may* be permitted and must be arranged *prior* to the exam unless it is a medical emergency. **The final exam is mandatory.**

PLEASE TURN OFF ALL CELL PHONES BEFORE COMING TO CLASS. Cell phones that ring will be confiscated for remainder of class period.

Homework:

Homework assignments must be downloaded from the course home page. Homework is due at the beginning of class. **Students are encouraged to type all homework so it may be turned in electronically if needed. All homework must be handed in at the beginning of class (by 9:30am) on the date due. Late homework can be handed in the day it is due with penalty. Late homework must be turned into a department secretary in either Agri 217 or Agri 220. Any late homework left in my mailbox or in my office will NOT be accepted. Late homework will be penalized as follows: Date due: 9:35 to 10:20am (-5 pts), 10:21 to 12:00pm (-15 points) 12:01- 4:30pm (- 50 points). No homework will be accepted after 4:30pm on the due date for any reason. All electronically sent homework must be received by 9:30am on the day it is due to receive full credit. Please send all homework electronically to jhpopp@uark.edu as well as Agec4413@yahoo.com.**

Requirements of Graduate/Law Students:

It is university policy that post baccalaureate students who take an undergraduate level class must be held to a higher standard. As such, graduate/law students can expect additional questions on homeworks/exams and will be expected to provide more thorough answers than undergraduates. This policy will be explained in class.

Site Visits:

All students are required to participate in one **site visit** for a case study of a regional environmental economics issue. These required visits take place on **Friday afternoons**. Further explanation will be given in class.

Case Study:

All students are required to create a short case study based on the site visit. Students will work in teams. Teams will be required to turn in a five page double spaced report. Further explanation will be given in class.

Textbooks:

Most required readings will be taken from: 1) Scott Callan and Janet M. Thomas. 2003. Environmental Economics and Management Theory Policy and Applications. Irwin Publishers. Third Edition. 2) G.D. Carlson, D. Zilberman and J. Miranowski, eds. Agricultural and Environmental Resource Economics. Oxford University Press, 1993. 3) Eban S. Goodstein *Economics and the Environment*. Prentice Hall 1995. ONE copy of Callan and Thomas (C&T) and Carlson, Zilberman and Mironowski (CZM) will be placed on two-hour reserve at the library. Books are also available for purchase in the bookstore. Other required readings will be placed on reserve.

Class Attendance:

As an economist, you must learn to manage your scarce resources, time being one of them. Attendance is *optional*. However, you are highly encouraged to weigh the opportunity costs of missing class as lectures will greatly aid in the understanding of the material. Some test and quiz questions may come directly from material presented only in class (not in your textbook). Pop quizzes may be given. Class participation will be considered in cases of a borderline grade.

Class Notes:

An effort will be made by the instructor to provide students with an outline of the slides presented in class. An effort will be made to have notes for any given week available on the web by 5:00 PM the Friday before the start of the lecture week. However, there is no guarantee notes will be made available each week, and even when available, these notes will *not* be complete and *cannot* replace note taking in class.

Academic Dishonesty:

Copying of classmates answers on quizzes, homeworks and exams will result in a failing grade for the course.

Students with Disabilities:

If you want to request reasonable accommodations for this class due to a disability, you must first register with the Center for Students with Disabilities (CSD) and hand-deliver an official Accommodation Letter from the CSD to me during my office hours or after class.

Inclement Weather Policy:

If the university is open but the Fayetteville school system is closed during our class time, we will not have class. If both the university and Fayetteville school district are open by 9:30am, class will be held as scheduled. Please use your best judgement before getting on the road. **Students who live off campus will have the opportunity to make up a missed exam. However, in order to receive full credit on homework, homework must be emailed to the instructor by 9:30am the day it is due.**

Student Pictures:

Smile! All students whose picture is not available on my class roster page will have their photo taken during the first week of class. Bad hair day and other related excuses will not get you out of the photo shoot. The pictures are only to help me get to know you better and will not be displayed outside of my office.

Other Notes:

Students taking this course come from a variety of backgrounds. Some have a strong understanding of economics, others have strengths in other sciences law, or policy. It is hoped that all students will share thoughts and experiences in order to enhance the learning experiences. My goal is to make this a challenging and rewarding experience for everyone.

Course Outline, Reading Assignments, Homework Due Dates, and Exams (All materials subject to change)

Week	Week of	Topic	Reading Material (Additional materials listed in class notes).	H	
1	Jan 16	Overview of Environment Economics, Foundations in Economics	C&T Ch 1, CZM Ch 1 C&T Ch 2, Economics Handout on Web		
2	Jan 23	Foundations in Economics:	C&T Ch 2, Economics Handout on Web		
3	Jan 30	<i>LAST DAY TO DROP A COURSE WITHOUT A MARK OF A W</i>			
	Jan 30	Market Failures	C&T Ch 3, G Ch 3	I	
4	Feb 6	Conventional Solutions to Environmental Problems	C&T Ch 4-5, B&O Ch 2-4,G Ch 4		
5	Feb 13	Conventional Solutions to Environmental Problems (Con't)	C&T Ch 4-5, B&O Ch 2-4,G Ch 4		
6	Feb 20	Evaluation of Benefits and Costs - Market and Non Market	C&T Ch 6 - 9	II	
	Feb 24	First Exam	Materials from Weeks 1 through 5		
7	Feb 27	Evaluation of Benefits and Costs - Market and Non Market (Con't)	C&T Ch 6-9		
	Mar 1	EARLY PROGRESS GRADES FOR FRESHMEN AND SOPHOMORES			
8	Mar 6	Computer and State/National Issues	GAMS Student tutorial	III	
9	Mar 13	Computer and State/National Issues	GAMS Student tutorial		
	Mar 17	Second Exam	Materials from Weeks 6 though 9		
10	Mar 20	<i>SPRING BREAK</i>			
11	Mar 27	Air Quality	C& T 10-12	IV	
12	Apr 3	Air Quality Con't Water Quality	C& T 10-12 C& T 14 -16		
13	Apr 10	Water Quality Con't	C&T 14-16	V	
14	Apr 17	Solid Wastes/Toxic Substances	C&T 17-19		
15	Apr 24	Sustainability	C&T 20-21		
16	May 1	Catch Up Review		VI	
	May 4	<i>LAST DAY TO OFFICIALLY WITHDRAW FROM ALL SPRING COURSES</i>			
	May 5	<i>DEAD DAY</i>			
	May 10	Final Exam 12:30-2:30	Materials from Weeks 11 - 16		

This schedule will be modified based on the availability of guest speakers.