

# **Course Syllabus**

## **Economics 4545-001**

### **Environmental Economics**

#### **Fall 2006**

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Economics 105  
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Lecture Location: ECON 117  
Meeting Times: MWF 12 p.m. - 12:50 p.m.  
Office Hours: MW 10-11:30; and by appointment

Textbook: The Economic Approach to Environmental and Natural Resources, 3rd Edition, James Kahn (note: we will not start using the textbook until the third week of classes – students should purchase on-line). We will be focused on the first 9 chapters of the text.

## **Course Objectives**

This course will focus on the application of economic principals to address environmental problems.

## **Prerequisites**

The departmental requirement for this course is Economics 3070 (Intermediate Microeconomic Theory) or an equivalent course. Simple analytical models will be used throughout the course as a means of simplifying the topic at hand. Students should be comfortable with basic economic models of optimization (utility and profit maximization). Some calculus will be required. Be ready and willing to participate in class. The best classes are those in which you are an active participant. If you have an example or insight to share with the class, by all means speak up! Much can be learned from our interaction as a group. This process will be encouraged and sometimes required.

## **Course Components**

- Lecture (Mondays and Wednesdays): With help from you and your fellow students, lectures will be an interactive experience. I will encourage participation by calling on you and hopefully you will at times desire to share your own insights and experiences.

- Class Exercises (Fridays): Some topics lend themselves to in-class exercises as another way of learning. These exercises will sometimes involve the entire class and at other times involve smaller groups down to the individual level.
- Discussions (Fridays): I will provide you with section readings and then you will be required to verbally answer questions and discuss these readings with me and your fellow students.
- Briefs: In preparation for discussions, you will prepare word-processed briefs of each reading that intelligently summarizes the content of the reading in two pages **or less**. Briefs will be collected at the end of the discussion period and graded.
- Presentations (End of Course): Student teams will be required to identify and present a relevant case study. Evaluation will be based on presentation clarity and motivation for the case study. Presentations will be made using the internet in class.
- Homework: There will be mandatory homework assignments for each section.
- Midterms & Final: Two in-class midterms and a final will be given on the dates noted below. Make-up exams will not be possible for the midterms. If you have a legitimate and verifiable excuse, test weighting can be adjusted. Otherwise missing a midterm will result in a zero for the midterm that was missed. The final is mandatory. Failing to write the final will result in an F.

## Evaluative Criteria

Briefs 10%  
 Presentations 15%  
 Homework 10%  
 Midterm I 15%  
 Midterm II 15%  
 Final 35%

### Important Dates:

September 4 <sup>th</sup>	Labor Day – No Class
September 11 <sup>th</sup> , 14 <sup>th</sup> & 22 <sup>nd</sup>	I will be Traveling – No Class
October 1 <sup>st</sup>	Mid-Term # 1
September 22 <sup>nd</sup>	Student Lecture Topics Assigned
November 17 <sup>th</sup>	Mid-Term #2
November 20 <sup>th</sup> , 22 <sup>nd</sup> & 24 <sup>th</sup>	Fall Break – No Class
December 15 <sup>th</sup>	Last Day of Class – Review (student questions)
December 19 <sup>th</sup> (1:30 pm)	Final Exam

## **Attendance Requirement**

Daily attendance will be taken beginning the second class meeting and the first recitation. In order to receive a passing grade in the course, you must attend a minimum of 85% of the classes – with NO exceptions. A sign-in sheet will be circulated during each class. *It is your responsibility to make sure that you have signed in by the end of class.*

## **Special Accommodations Policy**

If you have specific physical, psychiatric, or learning disabilities and require accommodations, please let me know early in the semester so that your learning needs may be appropriately met. You will need to provide documentation of your disability to the Disability Services Office in Willard 322 (phone 303-492-8671). Furthermore, if you require time off for special religious or cultural holidays, this should be arranged in advance with me.

## **Policy Regarding Academic Dishonesty**

Academic dishonesty will not be tolerated. Breaches of this policy will result in a course grade of F and a reporting of the incident to academic affairs.

## **Course Overview**

### ***Part I – What could Economists Possibly Have to Say About the Environment?***

During the first two weeks of the course we will engage in a series of discussions aimed at identifying what are the key areas related to environmental policy where economists have something valuable to contribute. Each student will be required to identify a topic for discussion during one of the first three class periods (not counting our first meeting). I will distribute a sign up sheet for this requirement on the first day of class. On the day that they have chosen, students must turn in an article on the topic they have chosen and a one to two page (typed) discussion of the economic issues associated with the topic. Note that if we have already discussed a topic in a previous discussion, you can not turn it in as your topic on your chosen day.

### ***Part II – Market Failures and Solutions***

In this portion of the course, we will study why markets often fail when environmental goods and pollution are concerned. We will then use economic tools to evaluate the various strategies for government intervention to correct these market failures.

### ***Part III – Valuing Environmental Goods and Services***

In this section of the course, we will study both the theory associated with valuing environmental goods and externalities and the empirical techniques that economists use to estimate these values. We will also evaluate how these ideas translate to environmental decision making.

***Part IV – The Macro Economics of Environmental Economics***

While sections II and III of the course focus on the role of individual actors, this section of the course will focus on the link between environmental issues and the macro economy. Related to this discussion will be a consideration of the problems of Global Warming and Ozone depletion. Time permitting, we also will consider the environmental issues associated with energy production and consumption in our economy.

***Part IV – Case Studies***

During the final 3 weeks of class, students will work in groups of 3 or 4 to present case studies (2 per class period) on the economics of selected environmental issues.

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