ENNEC 100-Introduction to Energy and Earth Science Economics
Spring 2009, TTh 1:00-2:15, 160 Willard

Instructor: Professor Andrew Kleit, 507 Walker, 5-0711, ankl@psu.edu, Office hours: TTh: 2:30-3:30. Teaching Assistant: Brittany Smith, 123 Hosler, 610-331-0831, brs5061@psu.edu, Office Hours: MW: 4:00-5:00.

Format: This class introduces the economic method of analysis to the environmental and resource questions facing society. It introduces a “paradigm,” a way of thinking, that has four elements:

1) what advantages can be gained by using market forces?
2) what are the drawbacks of the market (“market failures”) that may lead to a rationale for government intervention?
3) what are the drawbacks of using government intervention (“government failure”)?
4) How to apply these three concepts to real-world situations.

The material will be presented through lectures and classroom experiments. A reading packet will be available in the bookstore. Examples of the experiments are in the reading packet. Quizzes and exams are based on problem solving and analysis of relevant economic questions. This implies you will have to explain your answers and show your work to gain proper credit.

This class is the first class in the major in Energy, Business, and Finance (EBF), the minor in Global Business Strategies, and a General Education elective. You should be aware that this is a more challenging class than most of the general education courses offered by the College of Earth and Mineral Sciences. More precisely, it is designed to determine how well students will do in the EBF major.

Some notes: Please contact me using regular email, not ANGEL. I do not read my ANGEL mail regularly. Also, while I am always happy to chat with you, be warned that speaking to me the day of a quiz or exam is unlikely to help you on the quiz or exam. This stuff takes a while to sink in. (This also implies it is not too helpful to “cram” for exams here.)

For advice on how to study for exams and quizzes in this class, I recommend reviewing a statement by James Watson, the Nobel-prize winning discoverer of DNA:

Learning to think should also make your life easier. During my first university years, I crammed far too much for exams, trying to be on top of all the topics given even semiprominence in my syllabi or texts. It would have been much better to focus on questions my teachers were certain to ask, which I could discern if I paid attention to their main take-home lessons.
Grading:
- **Quizzes** (best 3 out of 4)  15%
- **Experiments**          8
- **Homework** (3 or 4)     10
- **Mid-Term Exams** (2)    34
- **Final Exam**            33

Quizzes and exams will involve essay questions. All homework answers should be typed up, stapled, on one side of the paper, with answers fully explained. (You’ll want to fully explain your quiz and exam answers as well.) A small amount of extra credit will be offered in class. Please do not ask your instructor for any more, as this simply serves to annoy him.

**Calendar**
- January 13 (Tuesday): First day of class
- January 20 (Tuesday): Experiment I
- January 29 (Thursday): Quiz I
- February 5 (Thursday): Experiment II
- February 19 (Thursday): Quiz II
- February 26 (Thursday): Mid-Term I
- March 3 (Thursday): Experiment III
- March 8 and 10: Spring Break
- March 24 (Tuesday): Quiz III
- April 14 (Tuesday): Quiz IV
- April 21 (Tuesday): Mid-Term II
- April 28 (Tuesday): Experiment IV
- April 30 (Thursday): Final Class
- Date of Final to be announced.

**Reading List**
All readings will be in the course packet.

**I. The Basics of Supply and Demand**


Experiment I: Trading
Experiment II: Supply and Demand
II. Market Failure and Government Failure

Chapter 10, "Externalities," pages 203-222.
Chapter 11, "Public Goods and Common Resources," pages 223-241


“There’s no way to breeze through this burb,” Business Week, June 3, 1991, 20.

Schoenbrod, “The EPA's Faustian Bargain Can the agency reclaim its soul?” Regulation Vol.29, No. 3, Fall (2006) 36-42


Experiment III: Can You Save the Common Pool?

III. Environmental Problems and Market Mechanisms


Experiment IV: Tradeable Permits


**IV Energy and Resource Consumption**


Naturally, all students are required to follow the University’s policy on academic integrity. Check out www.ems.psu.edu/students/integrity/statement.html if you are interested in the details.