Economics 527
Environmental Economics
Spring 2003
Economics 527
Waters 328
2:30 MWF
E. W. Nafziger (nafwayne@ksu.edu)
Office hours: 9:30-10:00, 1:50-2:20, or by appointment--Waters 312 (I will notify you in advance about any day when there will be no office hours).

Econ 527. Environmental Economics. (3) II. Economics of environmental market failure and the efficient use of exhaustible and renewable resources. Topics include the application of markets and government policies to greenhouse warming, air and water pollution, and recycling. The course emphasizes a global perspective on environmental and natural resource economics. Pr.: Econ 120. The course is a university general education course and counts for the natural resources and environmental sciences secondary major.

Objectives: The primary objectives of the course are to analyze international environmental problems, with special focus on the relationship between the environment, natural resources, and economic development in developing countries. The major concentrations are on ecological versus economic approaches to the environment, sustainable development, population and development, poverty and environmental stress, grassroots environmental action by poor people, pollution and development, the economics of biodiversity and global warming, correcting measures of GNP for natural asset deterioration, intergenerational allocation of resources, green markets, and the impact of market imperfections and policy failures on environmental degradation.

Required text and reading assignments: Claflin Books and Copies (CBC). Environmental Economics, Spring 2003. Readings are required and are assumed in examination questions, but the lecture-discussion outline will not always parallel the reading. The book is at Claflin Books and Copies (CBC) (1814 Claflin Road, diagonal to Ackert Hall; phone – 776-3771).

Outside Speakers: We will have lectures/discussions by chemistry Professor Kenneth Klabunde on "The Greenhouse Effect and the Ozone Problem," Friday, April 4; and Professor Dustin Becker, a biologist, on “Saving a Tropical Cloud Forest: The Role of Total Economic Value (TEV)” Monday, April 14; and Professor David Norman, an economist, on “Biotechnology in Agriculture in Developing Countries,” Monday, April 21.

Grades: I plan four one-hour examinations, each worth 100 points (total 400 points); three 36-point multiple-choice exams (108 points total); an occasional internet exercise (each worth 10 points); and an occasional minute paper (5 points each). I have indicated tentatively the coverage of each exam (the readings and corresponding lectures just before the listing of the examination). Each one-hour exam is roughly half multiple choice and half essay/problem (see http://www.ksu.edu/economics/nafwayne/env00tes.doc for the exams in 2000, the last time I taught the class).

I plan a few 10-point out-of-class internet exercises where I will ask you to write a response to an aspect of world population data of interest to you at www.prb.org, click 2002 Population Data Sheet or www.census.gov/ipc/www/worldhtm/, click World Pop Profile, World Pop 1950 to 2050, World Pop Clock, World Vital Events per time Unit 2002, Historical Estimates of World Population; your reaction to a report or working group by the Intergovernmental Panel on Climate Change (IPCC) at http://www.ipcc.ch/; material on biodiversity such as http://www.ksu.edu/konza/keep/ on KSU’s Konza Prairie or material on Edmond Wilson’s view of biodiversity at http://www.islandpress.org/wilsoncd/mainm.html; World Bank material on sustainable development at http://www-esd.worldbank.org/ or Worldwatch material http://www.worldwatch.org/worldsummit/; or some other material on the World Summit on Sustainable Development, August 26 to September 4, 2002.
Minute papers ask the student, in 23 minutes, to respond to questions such as: “What was the most important thing you learned during this class?” and “What important question remains unanswered for you?”

Alternative to the Second, Third, or Fourth Exams: For any or all of the second, third, and fourth exams, the student may write a paper or give a talk instead of taking the exam (the paper must be a topic related to the readings and material to be covered on the exam), provided the student notifies the instructor in writing (e.g., on a 3” by 5” card) what topic he or she is presenting by the second class after the previous exam; notifies the instructor in writing of any changes in the topic; attends class regularly; and (if a talk) arranges with the instructor for the presentation to be near the time when the subject is discussed in class. (In the past, one student both took the exam and gave the talk, enabling that student to get the better of the two grades!). The average length of the paper is about 7-12 pages. You are expected to use standard bibliographical and citation procedures (if in doubt, use the procedures of a recent American Economic Review. For material on the web, the bibliographical citation must be complete, for example, Partha Dasgupta, “The Economics of the Environment,” Proceedings of the British Academy, Volume 90, pp. 165-221, Copyright © The British Academy, 1996, available at http://britac3.britac.ac.uk/pubs/keynes95/06sec5.html. Feel free to hand in an earlier draft so that I can give you comments that will allow you to improve your paper (but give me a few days to respond), or ask questions about your progress at earlier stages of work on your paper.

A student may instead present a 20-minute or so talk, as long as the student notifies the instructor as indicated in the previous paragraph. In addition, the student must arrange with the instructor in advance to present the talk near the time the subject is discussed in class. I have compiled an annotated bibliography of 263 environmental economic internet sites, classified by topic, at http://www.ksu.edu/economics/nafwayne/envweb.htm. You may consult this, but you need to examine the sites critically, being careful not to over rely on non-scholarly sources for papers or talks.

No alternative is possible for the first exam, or for the last exam, Monday, May 12, in Waters 328, 4:10-6 p.m. All students are required to take these exams. Plagiarism: University policy is: “Plagiarism and cheating are serious offenses and may be punished by failure on the exam, paper, or project; failure in the course; and/or expulsion from the university.” For more information refer to “Academic Dishonesty,” http://www.ksu.edu/uauc/fhbook/fhxf.html.

Honor system: The university has an honor system based on personal integrity, which is presumed to be sufficient assurance that in academic matters one's work is performed honestly and without unauthorized assistance. Undergraduate students, by registration, acknowledge the jurisdiction of the Undergraduate Honor System. The policies and procedures of the Undergraduate Honor System apply to all full and part-time students enrolled in undergraduate courses on-campus, off-campus, and via distance learning. A prominent part of the Honor System is the inclusion of the Honor Pledge, which applies to all assignments, examinations, or other course work undertaken by undergraduate students. The Honor Pledge is implied, whether or not it is stated: "On my honor, as a student, I have neither given nor received unauthorized aid on this academic work.” This statement means that the student understands and has complied with the requirements of the assignment as set forth by the instructor. A grade of XF can result from a breach of academic honesty. An XF would be failure of the course with the X on the transcript indicating failure as a result of a breach of academic honesty. For more information, refer to http://www.ksu.edu/honor.

Academic Accommodations for Students with Disabilities: If you have any condition, such as a physical or learning disability, which will make it difficult for you to carry out the work as I have outlined it or which will require academic accommodations, please notify me in the first two weeks of the course.

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Tentative Outline of Course:

1. Ecology and Economics

2. Sustainable Development
   Solow, "The Economics of Resources or the Resources of Economics," 15-31.

3. The Environment and Development

4. Population and Food
   Video, "Extending The Green Revolution in Indonesia" (The Power to Change #1).

5. Power, Inequality, and Environmental Degradation
   Boyce, “Inequality as a Cause of Environmental Degradation,” 101-114.
   Video, “Voices of the Poor.”

6. The Tragedy of the Commons
   Hardin, "The Tragedy of the Commons," 115-133.
   Video, “Poverty & Environmental Stress among Rural & Indigenous Peoples in Costa Rica.”

ONE-HOUR EXAMINATION

7. Green Markets
   A. Market Imperfections and Policy Failures
      Panayotou, "Market Failures and Environmental Degradation," 165-188.

   B. Green Taxes
   
8. The Environment and Property Rights Issues
   Video, “Trade, Automobiles, & Property Rights,” with Rees, Harris, Costanza, Maler, Minos.

ONE-HOUR EXAMINATION

9. Pollution

10. Groundwater
    Postel, “When the World’s Wells Run Dry,” 343-351.

11. Benefit Cost Analysis

12. The Economics of Global Warming
    Lecture by Prof. Kenneth Klabunde, "The Greenhouse Effect and the Ozone Problem."
Dunn and Flavin, “Moving the Climate Change Agenda Forward,” 393-419.

13. Tropical Forest and Externalities
Lecture by Professor Dustin Becker, “Saving a Tropical Cloud Forest: The Role of Total Economic Value (TEV).”

14. The Economics of Biodiversity
Lecture by Professor David Norman on biotechnology.

15. Natural Asset Deterioration and the Measurement of National Income
Video, “Natural Capital,” with Gaylord Nelson and Herman Daly
Video, “GNP and the Index for Sustainable Economic Welfare,” with Cobb, Daly, and Evans.

16. Environmental Resources, War, and State Violence
Renner, “Breaking the Link between Resources and Repression,” 509-538.
Gasana, “Remember Rwanda?” 539-548.
Kibreab, “Protecting Environmental Resources and Preventing Land Degradation,” 548-563.

ONE-HOUR EXAMINATION

16. Will Natural Resources Shortages Limit Future Economic Growth?
Video, Herman Daly, “The Limits to Growth,” in “Introduction to Ecological Economics.”

17. Daly's Impossibility Theorem: Economics as the Dismal Science Again (Mon., May 5)

ONE-HOUR (100-POINT) EXAMINATION (ALTHOUGH OFFERED DURING THE FINAL EXAMINATION PERIOD), MONDAY, MAY 12, IN WATERS 328, 4:10-6 p.m.