

ECON349 – ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS

COURSE SYLLABUS

SPRING 2012

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Course Schedule: Tuesday & Thursday, 3:30PM – 4:45PM. 214 Buckman Hall.

Office Hours: Wednesday 10:30PM – 12:30PM and by appointment
(e-mail to affusoe@rhodes.edu, write ECON349 in the subject)

Required Text-book: Tom Tietenberg & Lynne Lewis, *Environmental and Natural Resource Economics*, Eighth Edition, Boston: Pearson Addison Wesley, 2009. ISBN-13: 978-0-321-48571-7. Previous editions are acceptable, but the lectures will be based on the 8th edition.

The textbook is comprehensive. Only selected chapters will be assigned. Complex topics will be supplemented by additional materials. The course lectures will ease the comprehension of the assigned readings. Consequently, regular attendance of lectures is strongly advised.

Other readings may also be assigned and will be available on-line in the public folder.

Overview

In this course we study the economic and environmental implications of natural resource management. The course covers conceptual and methodological topics, including sustainability, that will be applied to contemporary issues such as depletion of renewable resources, land scarcity and climate change.

The first part of the course focuses on economic concepts and models as indispensable tools to analyze natural resources and environmental problems that will be discussed in the last two parts. In particular, in the second part of the course we will present contemporary

issues in energy and water economics in addition to the management of renewable resources such as fish stocks and forestry.

The final part of this course will introduce some problems related to the use of environmental resources such as air, rivers, lakes and oceans as repositories for pollution.

By the conclusion of this course, the student should be able to recognize the separate and complementary roles of markets and governments in allocating the use of environmental and natural resources and perform independent analyses of public policies related to contemporary environmental issues.

Prerequisite

ECON100

Course Format

The class format will be a combination of lectures and discussion, with student participation strongly encouraged. The student is responsible for all material presented in class, assigned homework and additional readings.

Course Requirements

- (i) Two mid-term exams and a final comprehensive exam. The exams will cover topics presented in the lectures. Some questions may require calculations so having a calculator on exam day is advisable.
- (ii) Three homework assignments to test student's analytic skills in environmental and resource economics.

Assessment Compliance

Due dates will be strictly adhered to. Extensions will be granted only in cases of documented college recognized excuse. It is student's responsibility to check the due date. For late homework submission, a penalty of 50% per day will be deducted from the score. After 48 hours the student will get zero credits.

Attendance Policy

Class attendance will not be registered but it will affect the grade if the student misses a test. The material that needs to be learned for homework and exams is presented during the classes. If the student skips the classes then will be responsible to ask his/her classmates for notes and assignments. Skip classes at your own risk!

Evaluation

	Max Score	Percent of Grade
Class Participation	100	10%
Homework (3 assignments)	200	20%
Midterm 1	200	20%
Midterm 2	200	20%
Final	300	30%
Total	1,000	100%

Grading Scale

Total Points	Grade
930 ... 1,000	A
900 ... 929	A-
870 ... 899	B+
830 ... 869	B
800 ... 829	B-
770 ... 799	C+
730 ... 769	C
700 ... 729	C-
670 ... 699	D+
630 ... 669	D
600 ... 629	D-
≤ 599	F

Special Instructions

Students are expected to be on time for each class and have their cell phones/pagers on silent mode.

Accessibility

Any student with a disability that may need accommodations in order to successfully complete all requirements of this course should visit the Office of Student Disability Services (SDS) located at Burrow Hall 4th floor, phone: 843-3885 or contact Melissa Buttler (butlerm@rhodes.edu). This office is responsible for registering students and ensuring the Colleges compliance with the provisions of Section 504 of the Rehabilitation Act of 1973 and expanded Title III of the Americans with Disabilities Act of 1990 (ADA).

Academic Misconduct

The Rhodes University Academic Honor Code will be followed in the event of academic misconduct. Acts of dishonesty in any work will result in the letter grade of F for all parties

involved. Please refer to the following document for more information:

http://www.rhodes.edu/images/content/CampusLife/Honor_Constitution.pdf

Course Outline
Readings from Tietenberg & Lewis

Topics:	Readings:
<i>Course Introduction, Environmental Challenges and the Role of Economics</i>	Chapter 1
Part 1. Economic Concepts, Models and Tools	
1. <i>Review of Mathematical Economics and Welfare Analysis</i>	Class Notes
2. <i>Valuing the Environment</i>	Chapter 2
3. <i>Methods of Valuing the Environment</i>	Chapter 3
4. <i>Property Rights, Externalities and Efficiency</i>	Chapter 4
5. <i>Dynamic Efficiency and Sustainable Development</i>	Chapter 5
Part 2. Depletable and Renewable Resource Economics	
6. <i>Overview on Depletable and Renewable Resources</i>	Chapter 7
7. <i>Energy Economics</i>	Chapter 8
8. <i>Introduction to Econometric Forecast</i>	Class Notes
9. <i>Water Resource Economics</i>	Chapter 10
10. <i>Food Economics</i>	Chapter 12
11. <i>Renewable Common Property Resources: Fisheries</i>	Chapter 14
Part 3. Economics of Pollution Control, Global Warming and Toxics	
12. <i>Overview</i>	Chapter 15
13. <i>Stationary Source Pollution: Power Plants</i>	Chapter 16
14. <i>Regional, Global and Mobile Source Pollution: Global Warming and Cars</i>	Chapter 17 – Chapter 18
15. <i>Water Pollution</i>	Chapter 19

Exam Dates

Midterm I – Thursday, 16 February 2012, 11:00AM

Midterm II – Thursday, 29 March 2012, 11:00AM

Final Exam – Tuesday, 1 May 2012, 1:00PM

This syllabus may be revised later depending on how the class proceeds