

## FOR670 – Resource and Environmental Economics

**Fall 2010**  
**Tu/Th 2:00 - 3:20**  
**321 Bray**

Instructor:	Dr. David Newman	Office:	319 Bray Hall
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Office Hours:	Open Door Policy; however, Appointments are Preferred		

### Required

Text: Perman, R., Y. Ma., J. McGilvray, and M. Common. 2003. *Natural Resource and Environmental Economics*, 3<sup>rd</sup> ed. Pearson Addison-Wesley.

Purpose: Traditional Economics is the study of how individuals choose, with or without money, to employ scarce productive resources that have alternative uses, to produce various commodities and services and distribute them for current or future consumption among various persons in society. (Based on a definition given in Samuelson, Paul A. 1976. *Economics*, 10th ed. McGraw-Hill, Inc.)

Economics is used to systematically analyze the costs and benefits of different patterns of resource allocation. Table 1 illustrates three long-established economic disciplines based on the directions of resource flows. Resource economics examines the flow of resources from the ecological sector to the economic sector. We will concentrate on applying economic theories and models to analyze decisions concerning the use of forest, marine, and water resources. Environmental economics examines the flows of resources (i.e., pollution) from the economic to the ecological sector. We will concentrate on applying economic theories and models to analyze three common policy tools used to mitigate pollution created through production and consumption.

Objectives: There are three objectives for this course. First, use and justify the choice of, economic theories and models to critically analyze resource allocation decisions and policies concerning the flow of forest, marine, and water resources into the economic sector. Second, use and justify the choice of, economic theories and models to critically analyze policy tools used to mitigate pollution. Finally, explain and interpret peer-reviewed and non-peer reviewed articles that use

economic theory and models applied to environmental and resource economic issues in written and spoken communication to any audience.

The grade you receive on any assignment will be based on ***your*** ability to ***demonstrate*** an ***analysis*** level of understanding of the three objectives. We will provide you with in-class examples and exercises of how this is done. This skill will be very useful in writing your papers.

#### Economic

Terms: You need to understand the jargon and terms that economists use to be able to explain these concepts to an intelligent person with no formal training in economics or natural resource economics. Therefore, you are responsible for knowing the definitions of all economic terms; we will not cover these in class. My advice is to create a glossary of economic terms.

Homework: There is a short paper and a term paper. These will be covered under a separate handout. The work you turn in must be done in a ***professional manner***. **The penalty for turning homework in late is 25% per day for each day late.**

#### Class

Participation: Your final grade depends, in part, on class participation.

#### Class

Notes: We will use PowerPoint slides to present some of the material and will be available on the class Blackboard webpage.

Email: We will periodically email you information by using your SU student email address. Therefore, you should check your SU student email.

Final Grade: The final grade is based on the following weighting:

1 Midterm	20%
Short Paper	15%
Term Paper	25%
Final Exam	35%
Class Participation & Attendance	5%
Total	100%

The final grade will be calculated as follows:

A	=	100% - 95%
A-	=	94.999% - 90.000%
B+	=	89.999% - 86.667%
B	=	86.666% - 83.334%

B-	=	83.333% - 80.000%
F	=	79.999% - 0%

### Student Support

Services: If you are having difficulties, missing classes, or personal problems, as noted in the ESF Student Handbook, there are offices at both ESF and SU available to provide academic support, as well as career, and personal counseling. The ESF Office of Career and Counseling Services, 110 Bray Hall, 470-6660, can direct you to the proper source of help.

### Confidentiality is assured

If you experience family or health emergencies, which will interfere with your ability to succeed in this or other courses, call the ESF Office of Career and Counseling Services (315-470-6660). This office can give official endorsement to your need for accommodation and will also contact all your class instructors for you, should such an emergency require you to be absent from campus.

### ESF Student Handbook:

A PDF version of the ESF Student Handbook can be downloaded from <http://www.esf.edu/students/handbook/>. This handbook serves as an official guidebook for ESF students. It outlines many of ESFs policies and services such as Codes of Student Conduct, Academic Policies, and Academic Grievance Procedures, etc. The Codes of Student Conduct spell out a student's rights **as well as** responsibilities. Inappropriate behaviors that disrupt the classroom learning environment will not be tolerated.

### ESF Judicial Handbook:

A PDF version of the ESF Judicial Handbook can be downloaded from <http://www.esf.edu/students/handbook/>. This handbook outlines the policies, processes, and procedures of ESFs judicial system. It includes such topics as Philosophy of the Code, Student's Rights/Responsibilities, and Code of Student Conduct, etc. Student's Rights/Responsibilities spell out appropriate and inappropriate behaviors. Inappropriate behaviors that disrupt the classroom learning environment will not be tolerated.

### Cell Phones, Beepers

Etc.: **All** cell phones, beepers, pagers, and similar electronic devices must have the ringer turned on vibrate. The only acceptable use of your electronic devices during class is to receive emergency messages.

## **SCHEDULE**

Week 1 (8/30 - 9/3): Introduction (**N & W**)  
Required Readings: Perman et al., Chapt. 1 and 5  
Fullerton & Stavins. 1998. RFF. Discussion Paper 98-29 (available on the class web page)

Week 2 (9/6 - 9/10): Introduction (Cont.) (**W**)  
Required Readings: Perman et al., Chapt. 2 and 4

Week 3 (9/13 - 9/17): Economics of Scarcity (**N**)  
Required Reading: Perman et al. Chapt. 14 and 15

### **Term Paper and Short Paper Assignment**

Week 4 (9/20 - 9/24): Capital Theory(**W**)/Investment Analysis Tools (**N**)  
Required Readings: Perman et al. Chapt. 11 and 13

Week 5 (9/27 - 10/1): Investment Analysis Tools (**N**)/Valuation of Natural Resources (**W** – Hedonic Pricing & TCM)  
Required Readings: Perman et al. Chapt. 12  
Wagner and Choi. 2000. (Available on the class web page)

Week 6 (10/4 - 10/8): Valuation of Natural Resources (**N** – CVM)/Discussion of Short Paper (**N & W**)

Week 7 (10/11 - 10/15): Common Property Resources I (**N**)  
Required Reading: Perman et al. Chapt. 17

### **Midterm 10/12**

Week 8 (10/18 - 10/22): Common Property Resources II (N)/Economics of Fisheries (N)

Week 9 (10/25 - 10/29): Economics of Forest Resources (W)

Required Reading: Perman et al. Chapt. 18

**Last Day to Drop a Class (10/26)**

Week 10 (11/1 - 11/5): Economics of Forest Resources (W)/Economics of Water Resources (N)

**Draft of Term Paper Due (11/4)**

Week 11 (11/8 - 11/12): Economics of Water Resources (N)/Economics of Environmental Quality (W)

Required Reading: Perman et al. Chapt. 6

Week 12 (11/15 - 11/19): Economics of Environmental Quality (W)/Standards, Taxes, and Subsidies (W)

Required Reading: Perman et al. Chapt 7

**Term Paper Reviews Due (11/16)**

Week 13 (11/22 - 11/26): Standards, Taxes, and Subsidies (W)

**Thanksgiving Break (11/24 – 11/25)**

Week 14 (11/29 - 12/3): Transferable Discharge Permits (N)

**Term Papers Due (12/2)**

Week 15 (12/6 - 12/10): Term Paper Presentations and Discussions (**N & W**)