#### **COURSE IDENTIFIERS**

ECON 455 Section 1: Environmental Economic Theory

Department of Economics

Spring 2014

Tuesday-Thursday 12:30-1:45

Gardner 308

## **INSTRUCTOR IDENTIFIERS**

Instructor: Andy Yates Office: Gardner 304

Office Hours: Tuesday-Thursday 11-12:30

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#### **CATALOG DESCRIPTION**

A rigorous economic analysis of environmental issues, with particular emphasis on the problem of designing appropriate institutions and regulations under private information and the interaction between economic and environmental systems. Topics include emission fees and marketable permits, pollution models, carbon regulation, and ecosystem service markets.

# **TARGET AUDIENCE**

The primary audience for this course is students majoring in Economics. Students will apply and extend their knowledge of microeconomic principles to environmental issues.

# **COURSE PREREQUISITES**

Students must have previously completed ECON 410.

# **COURSE GOALS and KEY LEARNING OBJECTIVES**

- 1. The primary goal is to apply economic theory to understand the principles of environmental protection. This will be achieved by applying concepts learned in lecture to homework problems.
- 2. The secondary goal is to help students to understand the interactions between economic and environmental systems. Again, this will be achieved by applying concepts learned in lecture to homework problems.

#### **COURSE CONTENT DESCRIPTION**

Microeconomics Review (1 week)

1. Class notes Chapter 1

#### **Economics of Public Goods and Pollution (3 weeks)**

1. Class notes Chapter 2,3

## Standards, Taxes, Permits (3 weeks)

1. Class notes, Chapter 4

#### **Private Information (3 weeks)**

1. Class notes Chapter 5

## **Spatial and Temporal Models (2 weeks)**

1. Class notes Chapter 6

#### **Carbon Regulation (1 week)**

1. Class notes Chapter 7

## **Ecosystem Service Markets (2 weeks)**

1. Class notes Chapter 8

#### **COURSE REQUIREMENTS**

There are three exams. The first two exams take place during the normal class time. The final exam will take place during the scheduled final exam period for the course.

There are also a series of homework assignments. These will be assigned in class as we proceed through the course notes.

#### **GRADING**

The two in-class exams count for 20 percent of the grade in the class. The final exam counts for 35 percent and the homework counts for 25 percent.

#### **COURSE POLICIES**

There are no make up exams. If you miss one, then you will receive a zero on that exam. The homework assignments are due at the beginning of class. Late homework will not be accepted. The final exam is given in compliance with the UNC final exam regulations and according to the UNC Final Exam calendar. Class attendance is highly recommended but not required.

#### **COURSE RESOURCES**

A comprehensive set of class notes is provided for free by the professor. These notes are posted on the Sakai page for the class.

## **HONOR CODE**

You may work with other students in small groups (up to three) on the homework assignments if you want. Please turn in one assignment for the group. Exams of course should be the work of one student only.

# **IMPORTANT DATES**

Tuesday, February 11 Exam 1
Tuesday, March 25 Exam 2
Friday, May 2, Noon Final Exam

# **SYLLABUS CHANGES**

The professor reserves to right to make changes to the syllabus, including homework due dates and test dates. These changes will be announced as early as possible.