# ECON 240 Environmental Economics Spring 2012

**Location:** Comenius 304

**Time:** 8:55 - 10:05 p.m.

**Instructor**: Dr. Sonia Aziz

Office: Comenius 204

**Office Hours**: 3:45 – 4:45 p.m. M,W; 1:00-3:00 p.m. T, or by appointment

**Phone:** 610-625-7702

**Email:** aziz@moravian.edu<sup>1</sup>

# **Course Content:**

The theory of externalities and market failure will provide the basis for applying microeconomic concepts to the study of environmental issues. Analytical tools will be explained and applied to problems with environmental dimensions. Criteria and strategies used in the development and implementation of environmental policies will be defined and summarized. Theoretical and policy formulations will be pursued with respect to environmental issues such as air and water quality.

# **Course Objectives**

- i) To apply microeconomic theory to the study of environmental issues.
- ii) To identify and critically evaluate economic policy issues.
- iii) To develop written and verbal skills in communicating an environmental economic perspective.

# **Prerequisites:**

Please be aware that math and graphical analysis will be used throughout the course (lectures, exams and assignments).

#### **Course Materials:**

<u>Required Text:</u> Environmental Economics by Field and Field, 5e, McGraw-Hill, Irwin, Publishers, 2009.

### **Supplemental Readings:**

The Theory of Environmental Policy by Baumol and Oates, Cambridge University Press.

Economics of the Environment: Selected Readings by Dorfman and Dorfman. Norton Publishers.

Environment and Resource Policies for the World Economy by Cooper. Brookings Institution.

Economics of the Environment by Stavins. Norton Publishers.

Selected readings/films (Placed on Blackboard/library reserve)

### **Evaluation:**

There will be two semester exams and a final. The final is cumulative. You must notify me BEFOREHAND if you need to reschedule an exam. If you do not take an exam on the date it is given without first making alternative arrangements, you will receive a score of zero for that exam. The class grade will be computed from grades on quizzes, participation in class discussions/debates, take

<sup>&</sup>lt;sup>1</sup> Please note that emails should follow protocol, which means it should include a salutation at the beginning (eg. Dear Dr. A. Leon) followed by a standard sign-off at the end (eg, Thanks, G. Arcturus).

home assignments, in class assignments and presentations. Moravian college policies regarding academic honesty will be enforced. Please read the **Academic Honesty Policy** that is included in the student handbook.

## Assignments, Classroom Participation and Expectations:

Students are required to read scheduled chapters before coming to class. Additional readings may be distributed in class, posted on blackboard or placed on reserve in the library. Homework must be turned in on time for full credit. Regular attendance is expected. Because contribution to the classroom community is counted as part of the class grade (see below for full breakdown), regular attendance is necessary to receive full credit in this category. The use of cell phones in the classroom is not permitted. The use of laptops in the classroom (subject to need for individual accommodations - see below) is also not permitted.

### Weights:

Test 1	20 %
Test 2	20 %
Final	30 %
Class Grade*	30 %

<sup>\*</sup> Based on attendance, classroom discussion, quizzes, in class assignments, take home assignments, classroom debate and presentations. Classroom discussion, in class assignments and quizzes count as 15% of the class grade; take home assignments and presentations count for 15% of the class grade.

# **Test Grading Policy:**

Test questions are short answer (analytical, definitional), multiple choice and essay questions (analytical and/or writing intensive). Sometimes a student will disagree with a grade assigned to particular question. This is a legitimate concern and will be addressed in the following procedure. To have an answer reevaluated, the student must submit a *written* request for a reevaluation. This request should identify the question in dispute, provide a written explanation why the student feels the question was incorrectly evaluated, and propose a suggested remedy. It is within the instructor's purview to apply qualitative judgment in determining grades for an assignment or for a course.

# **Grading Scale:**

A (92-100)	C (72-77.9)
A- (90-91.9)	C- (70-71.9)
B+ (88-89.9)	D+ (68-69.9)
B (82-87.9)	D (62-67.9)
B- (80-81.9)	<b>D-</b> (60-61.9)
C+ (78 – 79.9)	F (0-59.9)

### **Accommodation:**

Should you have any individual concerns regarding disability please discuss this with me during the first week of class in person or via email. In addition, individuals from the counseling center will work with you to verify your need for accommodation and will help determine the environment in which you will have the opportunity to succeed in this course. To this end, students who wish to request accommodations in this class for a disability should contact Mr. Joe Kempfer, Assistant Director of Learning Services for Disability Support, 1307 Main Street (extension 1510). Accommodations cannot be provided until authorization is received from the office of Learning Services.

#### **COURSE SCHEDULE**

Here is a tentative schedule and list of topics to be covered in class this semester. Schedule may be revised as we go forward. Also, depending on the background, interests and progress of the class we may cover more or less material or cover it in a different order:

### I. Conceptual Foundations

# Week of January 16

- 01/16 Introduction to Environmental Economics Chapter 1
- 01/18 Economy and Environment, Review of Economic Concepts and Analytical Tools Ch 2: Ch 3

# Week of January 23

- 01/23 Economy and Environment, Review of Economic Concepts and Analytical Tools Ch 2: Ch 3
- 01/25 Economic Efficiency and Equity Chapter 4

# Week of January 30

O1/30 General models in Pollution Control and Analytical Frameworks, Illustrations of Economic Perspectives – Ch 5, Notes from Chapter 19

### II. Economics of Environmental Quality and Analytical Methods

02/01 General models in Pollution Control and Analytical Frameworks - Ch 5, Ch 6

### Week of February 6

- 02/06 General models in Pollution Control and Analytical Frameworks Ch 5, Ch 6
- 02/08 General models in Pollution Control and Analytical Frameworks Ch 5, Ch 6

### Week of February 13

02/13 **Test 1** 

### III. Environmental Policy Analysis

02/15 Benefits and Costs: Benefit-Cost Analysis - Ch 7, Ch 8

### Week of February 20

- 02/20 Benefits and Costs: Benefit-Cost Analysis Ch 7, Ch 8
- 02/22 Benefits and Costs: Benefit-Cost Analysis Ch 7, Ch 8

#### Week of February 27

- 02/27 Tools to Measure Benefits Posted Readings
- 03/29 Tools to Measure Benefits Posted Readings

### Spring Recess

#### Week of March 12

- 03/12 Tools to Measure Benefits Posted Readings
- 03/14 Tools to Measure Benefits Posted Readings

#### Week of March 19

- 03/19 Water Pollution Arsenic in Drinking Water
- 03/21 Exercise on benefits measurement/welfare

#### Week of March 26

- 03/26 Film Viewing/Blue Gold
- 03/28 Film analysis

### Week of April 2

- 04/02 **Test 2**
- 04/04 Criteria for Evaluating Environmental Policies Ch. 9, Decentralized Polices, Command-and-Control Strategies Ch 10, Ch 11

#### IV. International Environmental Issues

### Week of April 9

4/11 Criteria for Evaluating Environmental Policies – Ch. 9, Decentralized Polices, Command-and-Control Strategies – Ch 10, Ch 11, Command and Control versus Incentive Based–Ch 12

#### Week of April 16

- 4/16 Command and Control versus Incentive Based Ch. 12; Special Topics; The Global Environment, Ozone Depletion, Global Warming Ch 23, Handouts, Readings TBA, International Environmental Issues Ch 21
- 4/18 Special Topics; TBA; Handout

# Week of April 23

- 4/23 Classroom Activity/Readings/Presentations
- 4/25 Classroom Activity/Readings/Presentations