AEC 445 – RESOURCE AND ENVIRONMENTAL ECONOMICS
Texas A&M University-Commerce
Department of Agricultural Sciences
Spring 2013

Instructor: Dr. Jose Lopez
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Class Time: TR 9:30 a.m. - 10:45 a.m., AGIT Room 255

Office Hours: For immediate consultation I will be available Tuesdays and Thursdays from 2:00 p.m. – 4:30 p.m. or by appointment. You are also welcome to stop by my office at any other time. If I am unable to meet with you at that time we will schedule an appointment.

Required Text: *Environmental & Resource Economics* by Tom Tietenberg and Lynne Lewis. Addison-Wesley, New York, 8th Ed., 2008. (ISBN 9780321485717 or ISBN 0321485718)

Prerequisites: None.

Teaching Philosophy:
1. A course must deliver information, concepts and methods that will be useful in the student's professional life. However, learning analytical reasoning skills and improving the ability to process and use information efficiently is more important than memorizing facts and formulas and performing procedures repeatedly.
2. Students learn best when theories, concepts and procedures are explained in plain language as well as formally, and are complemented with examples or applications that are relevant to the students.

Character Formation: It is important during your college education to learn the values and rewards of hard work, responsibility, honesty and striving for excellence at all times. The professor will promote character formation while teaching the course.

Course Description: This course explores approaches agricultural economists take to solve environmental and/or natural resource economic problems. It examines both the economic roots of environmental problems and the alternative solutions that may be implemented. The course introduces fundamental questions a policymaker must answer to analyze policy scenarios and determine environmental regulations, including issues related to efficiency and distribution.

Student Learning Outcome: To provide students with economic concepts that can be applied to the solution of current environmental problems. Upon completion of the course the student will have an understanding of the economic tools employed in the management and protection of natural and environmental resources. This student learning outcome will be measured by demonstrating understanding of following natural resource economics topics.

Topics:
Part I: Introduction to Environmental Problems and Comparison of Ideology
Chapter 1: Vision of the Future

Chapter 2: Valuing the Environment: Concepts

Part II: Evaluation Criteria to Current Environmental Problems
Chapter 3: Valuing the Environment: Methods
Chapter 4: Property Rights, Externalities, and Environmental Problems
Chapter 5: Dynamic Efficiency and Sustainable Development

Part III: Natural Resource Economics
Chapter 6: The Population Problem
Chapter 7: The Allocation of Depletable and Renewable Resources: An Overview
Chapter 8: Energy: The Transition from Depletable to Renewable Resources
Chapter 9: Recyclable Resources: Minerals, Paper, Bottles, and E-Waste

Grading:

Option I	
Exam 1	25.00%
Exam 2	25.00%
Final Exam	25.00%
Quizzes (announced)	10.00%
Student presentations	5.00%
Attendance & participation	10.00%
	100.00%

Option II	
Exam 1	23.33%
Exam 2	23.33%
Final Exam	23.34%
Quizzes (announced)	5.00%
Student presentations	5.00%
Attendance & participation	5.00%
Term paper	15.00%
	100.00%

Graduate Credit: To get graduate credit for this course, graduate students will write a term paper and answer additional questions on the exams. The term paper will allow students to integrate concepts and ideas from the course, in combination with their previous economic training, to solve a particular environmental problem of their choice. First, you will define a natural resource or environmental problem. Second, you will indentify groups or individuals (stakeholders) on each side of the issue, outline their economic position on the issue, and describe how you would identify and estimate their various economic values. Third, you will develop a policy proposal that could be used to solve the problem and describe how the proposed policy (your proposed recommendations) will affect each of the stakeholders. Finally, you will evaluate the strengths and weaknesses of your proposed policy.

Grades for graduate students will be determined as follows: 23.33% Exam 1, 23.33% Exam 2, 23.34% Exam 3, 5% Quizzes, 5% Student Presentations, 5.00% Class Attendance and Participation, and 15.00% Term Paper.

Note: Graduate students must consult their advisor as well as apply for graduate credit for this course to The Graduate School before the twelfth class day. Graduate credit is contingent upon approval by the Dean of Graduate Studies and Research.

Grading Scale:

Range	Grade
90-100.00	A
80-89.99	B
70-79.99	C
60-69.99	D
Less than 60	F

Exams: No makeup exams will be offered. A grade of zero will be assigned to any missed exam. Make sure you arrive in time.

Quizzes: Quizzes will be graded and discussed in class. Quizzes should be considered very important material for exams. Students are welcome to ask questions during office hours. Quizzes involve economic concepts, principles, methods and procedures that are applied to environmental problems.

Student Presentations: Students will form teams of 3 students that they will select. Each team will then prepare one PowerPoint presentation from relevant articles, topics discussed in the textbook, and/or topics provided by the instructor. For example, students can visit *The International Society for Ecological Economics* (http://www.ecoeco.org/content/), the *Online Encyclopedia of Ecological Economics* (http://www.ecoeco.org/education_encyclopedia.php), and/or the *Association of Environmental and Resource Economics* (http://www.aere.org/) and browse for articles, references, websites, or web data sources of the team's interest.

Class Attendance: A maximum of two unexcused absences will be allowed. Each additional unexcused absence will reduce your earned attendance grade by 3.33 points (30 meetings * 3.33 ≈ 100 points). The student is expected to use the unexcused absences for the days he/she gets sick or cannot attend to class because of a non-serious foreseeable or unforeseeable cause (e.g., flat tires, car problems, not feeling well, doctor appointments, visits to health clinics, field trips, sport activities and events, etc.). Excused absences must be for serious and unforeseeable causes, and fully documented. The instructor will pass attendance every class day during the first 5 minutes. If you are late, but arrive during the first 15 minutes of class, you should contact the instructor at the end of the class and you will earn ½ of a regular class attendance. It is your responsibility to contact the instructor in these cases. Similarly, if you come to class, you are required to stay until the end of the class period; otherwise, you will earn ½ of a regular class attendance.

Class Participation: Students should come to class prepared by reading and completing course assignments prior to class. It is the students' responsibility to be familiar with and understand all previously covered material prior to each new lecture. Class participation is about answering the instructor's questions and/or providing your constructive comments, ideas, or opinion when discussing examples, homework, and in-class exercises. Students are encourage to ask questions when they do not understand the class material; however, students do not earn participation points for asking questions.

Term paper: The term paper is optional for undergraduate students, but it is mandatory for graduate students interested in receiving graduate credit for this course (see section Graduate Credit above). The term paper guidelines can be downloaded from the eCollege website for this course (see section eCollege below).

Students with Disabilities: The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library
Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamu-commerce.edu

Counseling Center: A student that faces a crisis or a serious and unforeseeable event that affects his/her class performance must contact the Counseling Center, Student Services Building, Room 204, Phone (903) 886-5145. If important class material or course assignments are missed because of such crisis or event, the student must contact the instructor as soon as possible.

Academic Integrity: Students must follow the *Code of Student Conduct* in the *Student Guidebook (*http://web.tamu-commerce.edu/admissions/studentGuidebook.aspx*).* Any form of plagiarism or academic dishonesty will not be tolerated. Academic honesty is defined on *Chapter 13 Students (Academic)* of the *TAMUC Rules and Procedures (http://web.tamu-commerce.edu/aboutus/policiesproceduresstandardsstatements/rulesprocedures/)*:

> "Academic dishonesty" includes, but is not limited to, plagiarism (the appropriation or stealing of the ideas or words of another and passing them off as one's own), cheating, collusion (the unauthorized collaboration with others), and abuse (destruction, defacing, or removal) of resource material.

Bibliography (Not Required):

Natural Resource Economics by Barry C. Field. Waveland Press, Inc., Illinois, 2nd Ed., 2008. (ISBN 9781577665311 or ISBN 1577665317)

Environmental Economics In Theory and Practice by Nick Hanley, Jason Shogren, and Ben White. Palgrave Macmillan, New York, 2nd Ed., 2007. (ISBN 9780333971376 or ISBN 033397137X)

Environmental Economics: An Introduction by Barry C. Field and Martha K. Field. McGraw-Hill Irwin, New York, 5th Ed., 2008. (ISBN 9780073375762 or ISBN 0073375764)

Environmental Economics & Policy by Tom Tietenberg and Lynne Lewis. Addison Wesley, New York, 6th Ed., 2009. (ISBN 9780321599490 or ISBN 0321599497)

The Economics of the Environment by Peter Berck and Gloia Helfand. Addison Wesley, New York, 2011. (ISBN 9780321321664 or ISBN 0321321669)

Course Design: A separate sheet containing the course outline and class schedule as well as tentative scheduled activities and exams is provided at the end of this syllabus. Make sure you regularly check this page so that you come to class prepared.

eCollege: This course is offered web-enhanced. Students will be able to download PowerPoint presentations and other important class material from the eCollege website for the course (http://www.online.tamuc.org/). Make sure you visit this website when preparing for class.

Important Dates:

January 15th, Tuesday	First day of this class.
January 30th, Wednesday	Last day to drop a course with refund, if remaining enrolled
March 29th, Friday	Last day to drop while still enrolled
April 26th, Friday	Last day to withdraw from school
May 3rd, Friday	Last day of classes
May 12th, Thursday	Final Exam, 8:00 a.m. – 10:00 a.m.

The instructor reserves the right to make modifications to this syllabus during the semester.

AEC 445 – Resource and Environmental Economics
Class Schedule, Spring 2013
TR 9:30 - 10:45 a.m.

January			
Tuesday	Jan 15	**Intro**	**Syllabus**
Thursday	Jan 17	**Part I** Chapter 1	**Introduction to Environmental Problems and Comparison of Ideology** Vision of the Future
Tuesday	Jan 22	Chapter 1 Chapter 2	(continued) Valuing the Environment: Concepts
Thursday	Jan 24	Chapter 2	(continued)
Tuesday	Jan 29	Chapter 2 **Part II** Chapter 3	(continued) **Evaluation Criteria to Current Environmental Problems** Valuing the Environment: Methods
Thursday	Jan 31	Chapter 3	(continued)
February			
Tuesday	Feb 5	Chapter 3	(continued)
Thursday	Feb 7	Chapter 3	(continued) ***2 Student Presentations (20-25 minutes each presentation)***
Tuesday	Feb 12	Chapter 3	(continued)
Thursday	Feb 14	***Exam I***	
Tuesday	Feb 19	Chapter 4	Property Rights, Externalities, and Environmental Problems
Thursday	Feb 21	Chapter 4	(continued)
Tuesday	Feb 26	Chapter 4	(continued) ***Submit via eCollege your Term Project Memorandum***
Thursday	Feb 28	Chapter 4 Chapter 5	(continued) Dynamic Efficiency and Sustainable Development
March			
Tuesday	Mar 5	Chapter 5	(continued) ***2 Student Presentations (20-25 minutes each presentation)***

Thursday	Mar 7	**Part III**	**Natural Resource Economics**
		Chapter 6	The Population Problem
Tuesday	Mar 12	***Spring Break (No Class)***	
Thursday	Mar 14	***Spring Break (No Class)***	
Tuesday	Mar 19	Chapter 6	(continued)
Thursday	Mar 21	Chapter 6	(continued)
Tuesday	Mar 26	***Exam II***	
Thursday	Mar 28	Chapter 7	The Allocation of Depletable and Renewable Resources: An Overview
April			
Tuesday	Apr 2	Chapter 7	(continued) ***2 Student Presentations (20-25 minutes each presentation)***
Thursday	Apr 4	Chapter 7 Chapter 8	(continued) Energy: The Transition from Depletable to Renewable Resources
Tuesday	Apr 9	***Area V and VI FFA Career Development Event***	
Thursday	Apr 11	Chapter 8	(continued)
Tuesday	Apr 16	Chapter 8	(continued)
Thursday	Apr 18	Chapter 8	(continued)
Tuesday	Apr 23	Chapter 8	(continued)
Thursday	Apr 25	Chapter 9	Recyclable Resources: Minerals, Paper, Bottles, and E-Waste
Tuesday	Apr 30	Chapter 9	(continued)
May			
Thursday	May 2	Chapter 9 ***Submit via eCollege your Term Project Written Paper***	(continued)
Thursday	May 9	***Final Exam (8:00 -10:00 a.m.)***	

This is a tentative class schedule. The instructor reserves the right to make any modification.