



# AEC 445.01W: RESOURCE AND ENVIRONMENTAL ECONOMICS

COURSE SYLLABUS: Spring 2020

## INSTRUCTOR INFORMATION

**Instructor:** Dr. Rafael Bakhtavoryan

**Office Location:** Agricultural Science Building, Room 154

**Office Hours:** Wednesdays at 2:00p.m.-3:00p.m., and Tuesdays & Thursdays at 11:00a.m.-1:00p.m., or by appointment

**Office Phone:** (903) 886-5367

**Office Fax:** (903) 886-5990

**University Email Address:** [Rafael.Bakhtavoryan@tamuc.edu](mailto:Rafael.Bakhtavoryan@tamuc.edu) (please, use only this email address and put "AEC 445" in the subject of the email)

**Preferred Form of Communication:** Email

**Communication Response Time:** Within 24 hours Monday through Friday

## COURSE INFORMATION

**Class Meeting:** Web-based

### ***Readings***

**Required Textbook:** *Environmental Economics and Management: Theory, Policy, and Applications*, by Scott J. Callan and Janet M. Thomas, Cengage Learning, 6th edition, 2012.

**Required:** PowerPoint Presentations: These will be provided on D2L.

### ***Course Description***

This course explores the approach that economists take toward environmental and resource problems. It examines both the economic roots of environmental problems and their potential solutions. The course focuses on questions a policymaker must face in deciding how and when to regulate, including issues regarding efficiency and distribution.

*The syllabus/schedule are subject to change.*

### ***Lecture Topics***

CHAPTER 1: The Role of Economics in Environmental Management

CHAPTER 2: Modeling the Market Process: A Review of the Basics

CHAPTER 3: Modeling Market Failure

CHAPTER 4: Conventional Solutions to Environmental Problems: The Command-and-Control Approach

CHAPTER 5: Economic Solutions to Environmental Problems: The Market Approach

CHAPTER 6: Environmental Risk Analysis

CHAPTER 7: Assessing Benefits for Environmental Decision Making

CHAPTER 8: Assessing Costs for Environmental Decision Making

CHAPTER 9: Benefit-Cost Analysis in Environmental Decision Making

CHAPTER 10: Air, Water, Solid Waste and Toxic Substances

### ***Student Learning Outcomes***

After studying all materials and resources presented in this course, students will be able to:

1. Master basic economic models of the environmental economics.
2. Develop an understanding of environmental issues and the various mechanisms used to improve upon market outcomes.
3. Use benefit-cost analysis to examine environmental issues.
4. Apply economic thinking to environmental problems and policies.
5. Learn about local and international environmental issues.

## **COURSE REQUIREMENTS**

### ***Minimal Technical Skills Needed***

Students are expected to know how to use the learning management system (D2L will be used heavily in this class), Microsoft Word and PowerPoint.

### ***Student Responsibilities or Tips for Success in the Course***

1. Read the assigned readings.
2. Complete and turn in course assignments and exams at the scheduled time.
3. Use the web to actively seek out other resource and environmental economics resources that fit your learning style and help you better understand the material.
4. Be prepared for exams.

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## GRADING

Your grade for the semester will be a weighted average of homework assignments, four equally weighted exams, and a comprehensive final exam.

Homework assignments	10%
Exam 1	15%
Exam 2	15%
Exam 3	15%
Exam 4	15%
Final Exam	30%
<b>TOTAL</b>	<b>100%</b>

Final grades in this course will be based on the following scale:

A = 90%-100%

B = 80%-89.99%

C = 70%-79.99%

D = 60%-69.99%

F = 59.99% or below

### **Assessments**

**HOMEWORK ASSIGNMENTS (HAs):** Homework assignments are assigned regularly (see the course outline at the end of the syllabus) and must be completed individually. As a form of experiential learning, HAs help students sharpen their analytical skills. Students must turn in their HAs in Microsoft Word format (or at least in pdf format, although the Word format is encouraged in order for me to provide feedback) via D2L according to the course outline. HAs must be submitted by 11:30 p.m. (Central Time) on the due date. No late HAs will be accepted and a grade of zero will be assessed for missed HAs.

**EXAMS:** Exams will be administered through D2L (see the course outline at the end of the syllabus for specific exam dates). Exams have to be completed by 11:30 p.m. (Central Time) on the due date. Exams will be timed and you will have 1 hour and 30 minutes to complete the exam. Make sure you have internet access ahead of time and that your laptop battery is fully charged. No make-up exams will be given. If an exam is missed a grade of zero will be assessed for it. Exams have to be completed individually using your own student account and there should be no collaboration or sharing of work with your classmates on the exams. Final exam is **comprehensive** and you will have 2 hours to complete it.

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## TECHNOLOGY REQUIREMENTS

### LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>

LMS Browser Support:

[https://documentation.brightspace.com/EN/brightspace/requirements/all/browser\\_support.htm](https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm)

YouSeeU Virtual Classroom Requirements:

<https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements>

## ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or [helpdesk@tamuc.edu](mailto:helpdesk@tamuc.edu).

**Note:** Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

## COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

### Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

<https://community.brightspace.com/support/s/contactsupport>

### Interaction with Instructor Statement

The instructor's communication response is stated clearly (see page 1).

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# **COURSE AND UNIVERSITY PROCEDURES/POLICIES**

## **Course Specific Procedures/Policies**

No late assignments will be accepted and a grade of zero will be assessed for them.

## **Syllabus Change Policy**

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

## ***University Specific Procedures***

### **Student Conduct**

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the [Student Guidebook](#).

<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum:

<https://www.britannica.com/topic/netiquette>

### **TAMUC Attendance**

For more information about the attendance policy please visit the [Attendance](#) webpage and [Procedure 13.99.99.R0.01](#).

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

### **Academic Integrity**

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty 13.99.99.R0.03](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

[Graduate Student Academic Dishonesty 13.99.99.R0.10](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf>

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## ***Students with Disabilities--ADA Statement***

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 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: [studentdisabilityservices@tamuc.edu](mailto:studentdisabilityservices@tamuc.edu)

Website: [Office of Student Disability Resources and Services](#)

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

### **Nondiscrimination Notice**

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

### ***Campus Concealed Carry Statement***

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Web url:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

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# COURSE OUTLINE

**AEC 445.01W: Resource and Environmental Economics**

**Spring 2020**

**WEB-BASED**

Weeks	Topic/All assignments are due on specific dates listed below by 11:30 p.m via D2L. For example, homework assignment 1 is due January 19 by 11:30 p.m., or homework assignment 2 is due January 26 by 11:30 p.m., or EXAM 1 is due February 9 by 11:30 p.m.
<b>Week 1</b> Jan 13 – Jan 19	Syllabus & D2L Tutorial, CHAPTER 1: The Role of Economics in Environmental Management, Homework Assignment (HA) 1
<b>Week 2</b> Jan 20 – Jan 26	CHAPTER 2: Modeling the Market Process: A Review of the Basics, HA 2
<b>Week 3</b> Jan 27 – Feb 2	CHAPTER 3: Modeling Market Failure, HA 3
<b>Week 4</b> Feb 3 – Feb 9	<b>EXAM 1. Chapters 1, 2, 3</b>
<b>Week 5</b> Feb 10 – Feb 16	CHAPTER 4: Conventional Solutions to Environmental Problems: The Command-and-Control Approach, HA 4
<b>Week 6</b> Feb 17 – Feb 23	CHAPTER 5: Economic Solutions to Environmental Problems: The Market Approach, HA 5
<b>Week 7</b> Feb 24 – Mar 1	<b>EXAM 2. Chapters 4, 5</b>
<b>Week 8</b> Mar 2 – Mar 8	CHAPTER 6: Environmental Risk Analysis, HA 6
<b>Week 9</b> Mar 9 – Mar 15	<b>Spring Break: No Class</b>
<b>Week 10</b> Mar 16 – Mar 22	CHAPTER 7: Assessing Benefits for Environmental Decision Making, HA 7
<b>Week 11</b> Mar 23 – Mar 29	<b>EXAM 3. Chapters 6, 7</b>
<b>Week 12</b> Mar 30 – Apr 5	CHAPTER 8: Assessing Costs for Environmental Decision Making, HA 8
<b>Week 13</b> Apr 6 – Apr 12	CHAPTER 9: Benefit-Cost Analysis in Environmental Decision Making, HA 9
<b>Week 14</b> Apr 13 – Apr 19	CHAPTER 10: Air, Water, Solid Waste and Toxic Substances (for this chapter, do not read the textbook, just read the PowerPoint presentation for chapter 10), HA 10
<b>Week 15</b> Apr 20 – Apr 26	<b>EXAM 4. Chapters 8, 9, 10</b>
<b>Week 16</b> Apr 27 – May 3	<b>FINAL EXAM. Chapters 1 through 10</b>

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