

## ECON 375-001, ENVIRONMENTAL ECONOMICS

TuTh 12:30 PM – 1:45 PM, ST 210

FALL 2023

**PROFESSOR:** Dr. Tom Rhoads

**OFFICE:** 101-E Stephens Hall

**OFFICE HOURS:** TuTh 11 AM – Noon & 2 PM – 2<sup>30</sup> PM, and by appointment

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### COURSE CATALOG DESCRIPTION

Applying tools of economic theory to issues focusing on natural resources and environmental policy. Topics include market failure, valuation of non-market goods, cost-benefit analysis and pollution. Prerequisite: ECON 201/203.

### DETAILED COURSE DESCRIPTION

Environmental economics studies the impact of the economy—particularly market systems of allocation—on environmental quality and ecological integrity. This course provides an initial investigation of how and why people make decisions that ultimately affect the natural environment. It also examines the institutions, regulations and policies that are intended to generate efficient levels of pollution and increase the net value of economic activity. Attention is given to current federal, state, and local environmental issues.

### COURSE MATERIALS AND REQUIRED BOOKS

- TU Microsoft 365 account at <http://m365.towson.edu> (Course content delivery)
- TU Blackboard account at <http://blackboard.towson.edu> (Course grade delivery)
- Aldo Leopold, *A Sand County Almanac*, Ballantine Books, 1986 Reprint Edition (ISBN 0-345-34505-3)
- Rachel Carson, *Silent Spring*, Mariner Books, 2002 Edition (ISBN 978-0-618-24906-0)
- Jeremy Rifkin, *The Hydrogen Economy*, Tarcher/Penguin, 2002 (ISBN 978-1-58542-254-8)

### RECOMMENDED TEXTBOOK

- Jonathan Harris and Brian Roach, *Environmental and Natural Resource Economics: A Contemporary Approach*, 5<sup>th</sup> edition, Routledge, 2022 (ISBN 978-0-367-53138-6)

### LEARNING OBJECTIVES

You will become familiar with the methods of economic analysis as they apply to environmental issues. You will be able to consider an environmental problem from an economic perspective.

### GRADING AND COURSE REQUIREMENTS

Your grade for this course will be based on your performance on two exams, three homework assignments, and ten reading quizzes.

Reading Quizzes (10 @ 15 pts)	150
Homework Assignments (3 @ 50 pts)	150
Mid-Term Exam	100
Final Exam	100
<b>TOTAL POINTS</b>	<b>500</b>

Generally, you can expect to earn no less than an A with at least 463 points, no less than an A- with at least 448 points, no less than a B+ with at least 433 points, no less than a B with at least 413 points, no less than a B- with at least 398 points, no less than a C+ with at least 383 points, no less than a C with at least 348 points, no less than a D+ with at least 333 points, and no less than a D with at least 298 points.

### READING QUIZZES AND HOMEWORK ASSIGNMENTS

Ten reading quizzes to assess reading comprehension of the required books will be available on Microsoft OneNote. A reading schedule will be available in the course OneNote Class Notebook. A series of three homework assignments—each worth 50 points—will be given. Homework assignments must be completed using Microsoft Word and are tentatively scheduled with the following due dates:

- Thursday, September 14, 2023
- Thursday, October 12, 2023
- Thursday, November 16, 2023

### EXAMS

If you are involved in a university-sponsored activity that conflicts with an exam date, you must notify the professor at least two weeks in advance to arrange an alternate testing time and location. If you miss an exam without notifying the professor in advance, you must contact the professor as soon as possible concerning the absence and secure a university excuse for your absence. Then a make-up exam will be given at the earliest possible time. Without a university excuse, you will receive a score of 0 for the missed exam.

## **ATTENDANCE POLICY**

While attendance will not be taken in class, university policy states that students are expected to attend all classes. Note that poor attendance is often correlated with poor results on reading quizzes, homework assignments, and exams.

## **ACADEMIC DISHONESTY AND ACADEMIC INTEGRITY**

Also known as “cheating,” academic dishonesty will not be tolerated in this class. Cases of academic dishonesty will be prosecuted in accordance with university regulations. Cheating in this course can result in an “F” in the course. The course academic integrity policy is consistent with the TU Academic Integrity Policy.

## **ELECTRONIC DEVICES**

In order to help foster a classroom environment favorable to learning, please turn off or silence your phone and any other electronic device that is not designed to aid in-class learning. You will not be allowed to use a phone as a calculator in this class. Failure to follow these policies could result in a significant classroom disruption.

## **STUDENT EVALUATIONS**

Student evaluations of this course play a crucial role in its delivery. This semester, all course evaluations will be administered online during the last two weeks of the course. You will receive an email with a link to the website with directions on how to access the survey. It is vitally important that you complete the survey as the results are used to possibly modify the course and assess teaching. The University uses the results to address technology and facility needs. You can be assured that your responses will be confidential as the results are revealed only after the grading period has ended and they will not include any identifying information.

## **COURSE WITHDRAWAL**

The last day to withdraw from this class is November 6, 2023 and is noted in the online Academic Calendar. Students withdrawing on or before this date will receive a “W” on their official transcript.

## **REPEATED COURSE**

According to University policy, all students may repeat any course once. If repeating, you are advised to inform the instructor. For a third attempt, the student must obtain prior written approval from the Academic Standards Committee. Students enroll for a third attempt without permission at their own risk.

## **STUDENTS WITH DISABILITIES**

This course is in compliance with Towson University policies for students with disabilities. Students with disabilities are encouraged to register with Accessibility & Disability Services (ADS), 7720 York Road, Suite 232, 410-704-2638 (Voice) or 410-704-4423 (TDD). Students who suspect that they have a disability but do not have documentation are encouraged to contact ADS for advice on how to obtain appropriate evaluation. A memo from ADS authorizing your accommodation is needed before any accommodation can be made.

## **COURSE OUTLINE AND SCHEDULE**

- I. Environmental Problems (Silent Spring)
  - A. Introduction (*Textbook*: chapter 1)
  - B. Markets and Economic Efficiency (*Textbook*: appendix 3.1)
  - C. Market Failure (*Textbook*: chapter 3 and 4.2; appendix 3.2)
- II. Solutions to Environmental Problems (The Hydrogen Economy)
  - A. Command-and-Control Approach (*Textbook*: chapter 8)
  - B. Incentive-Based Strategies (*Textbook*: chapter 8 and 3.1)

## **MIDTERM EXAM TENTATIVELY SET FOR THURSDAY, OCTOBER 19, 2023**

- C. The Green Economy and Hydrogen Fuel Cells (*Textbook*: chapter 14; various readings)
- III. Environmental Planning and Analysis (A Sand County Almanac)
  - A. Assessing Environmental Costs and Benefits (*Textbook*: chapter 6)
  - B. Benefit-Cost Analysis (*Textbook*: chapter 7)
- IV. Environmental Policy
  - A. Air, Water, and Toxic and Hazardous Substances (*Textbook*: chapter 8.5)
  - B. Climate Change (*Textbook*: chapters 12 and 13)
  - C. Hydraulic Fracturing/Fracking (various readings)

## **FINAL EXAM IS SCHEDULED FOR TUESDAY, DECEMBER 12, 2023, 12:30 PM – 2:30 PM**