

**UNIVERSITY OF WYOMING  
COLLEGE OF BUSINESS  
DEPARTMENT OF ECONOMICS**

**ECON 4400 - ENVIRONMENTAL ECONOMICS  
TR 11:00am-12:15pm in College of Business (COB) BU 210  
SPRING 2018**

**Instructor:** Stephanie Brockmann

**Office:** BU 286

**Office Hours:** TR 12:30pm to 2:00pm, or by appointment

**E-Mail:** [sbrockm3@uwyo.edu](mailto:sbrockm3@uwyo.edu)

**Telephone:** Department #: 307-766-2178

**Course Website:** WyoCourses – the home base for course announcements, assignment postings/due dates, and grades. You are expected to check this page regularly for updates and additional material.

**TA:** Jennifer Rushlow; [jrushlow@uwyo.edu](mailto:jrushlow@uwyo.edu)

**Office Hour:** M 12:00 to 1:00pm in BU 63

**Course Prerequisites:**

- Intermediate Microeconomics (ECON 3020) and Junior Standing

**Required Textbook:**

- Environmental Economics by Charles D. Kolstad, 2<sup>nd</sup> Edition
- ISBN: 978-0-19-973264-7

**Supplementary Textbooks (Optional):**

- Economics and the Environment, Goodstein and Polasky, 8<sup>th</sup> Edition
- Introduction to Environmental Economics, Hanley, Shogren, and White, 2<sup>nd</sup> Edition

**Course Description:**

This course is designed to broaden your thoughts on how economics and the environment are connected to one another. Often feedbacks exist amongst both systems (e.g. land is needed to produce crops, yet producing crops can degrade soil) making regulation or management of such systems a complex problem. To answer questions as these, we will explore matters of resource allocation, social costs, environmental valuation techniques/issues, and regulation/policy approaches. For much of the class, we will be interested in evaluating the implications of environmental issues on welfare outcomes.

## Learning Objectives:

By course end it is expected that students will be able to:

- (1) Demonstrate an understanding of what constitutes an environmental economic problem.
  - a. What is the issue at hand?
  - b. How are the environment and economic systems linked?
- (2) Critically discuss environmental concerns from the perspective of an economist.
  - a. What are the costs/benefits and are they measureable?
  - b. Why should we care?
  - c. How do positive and normative economic approaches differ and matter for the analysis?
- (3) Identify and understand market and government failures as they relate to environmental issues.
  - a. Is the problem caused by an externality or missing market/law?
  - b. Is the environmental good a public good or private good?
  - c. Can it be used in production or not?
- (4) Use graphical and analytical tools to understand the environmental problem and the mechanisms used to regulate the outcome.
  - a. When might we need incentives like taxes, bargaining, or permits?
  - b. What makes outcomes most efficient from an economic perspective?
- (5) Take the skills and tools gained in (1) through (4) and use them to analyze real world situations, improve critical thinking, and solve problems.

**Disclaimer: All of the information below is subject to change when deemed necessary by the instructor. Students will be notified verbally in class or via postings on the class homepage if such changes occur.**

## Outcomes and Grade Determination:

Your ability to show understanding of course material will be evaluated through a variety of methods: exams, in-class participation/homework, and a complete research project.

### Exams:

There will be **two** exams: a midterm and a final. Each exam will carry equal weight, which is 20% of the final grade or 40% in total. Unless you miss an exam for a university-recognized reason, few exceptions will be made with regard to taking an exam other than at the scheduled time. If you are aware that you will be missing an exam, a **make-up will only be given if you have spoken with me in advance** (i.e. prior to the exam being given). Please note the expected exam dates and plan accordingly.

The midterm exam is scheduled for **March 8<sup>th</sup>**, during our regularly scheduled class time. The final exam **will be comprehensive (all material in class)** and will be on **Tuesday, May 8<sup>th</sup>, from 10:15am to 12:15pm.**

Alternate final exam times cannot be accommodated, as per the Office of the Registrar and Academic Affairs. Exceptions to that policy are only allowed if (1) you have more than two exams the day of the final, or (2) you have two exams scheduled at the same time. Should this be the case you must contact the Registrar's Office.

#### Homework/In-Class Work:

Homework assignments and in-class work will be on a point-based system. There will be 3 or 4 homework assignments, depending on the pace of progress. **Late homework submissions will lose 25% per day.** Your lowest homework score will be dropped. As for in-class work, we will occasionally do activities (e.g., experiments, quizzes, games, group work). Any activity done in class **cannot** be made up, unless the missed class is for a university-recognized reason. Together homework and in-class work will be worth 25% of your final grade.

#### Paper/Proposal

One of the most important components of the course is a project you will work on regarding a current environmental issue. You must confirm your topic with me by **February 22<sup>nd</sup>**. If you have not done so, you will be assigned a random topic of my choosing. The project will be graded in four parts:

##### *Part One: Presentation I*

- You will give a 5-minute (strict time limit) presentation, explaining the topic, why it matters, what your research question is, and your next steps.

##### *Part Two: Outline*

- Accompanying the presentation will be a detailed (i.e., citations, descriptions of the progress) outline of the project.

##### *Part Three: Presentation II*

- You will give a 10-minute (strict time limit) presentation, providing a synopsis of the completed paper/proposal.

##### *Part Four: Paper/Proposal*

- *This will be a completed proposal for answering your research question. More detail on the exact requirements will be discussed following the finalized selection of all topics.*

Quick View of Weighting Scheme:

<b>Research Project</b>	<b>35%</b>
- <i>Presentation I</i>	(5%)
- <i>Detailed Outline</i>	(5%)
- <i>Presentation II</i>	(5%)
- <i>Paper/Proposal</i>	(20%)
 <b>In-Class Work/Homework</b>	 <b>25%</b>
<b>Midterm Exam</b>	<b>20%</b>
<b>Final Exam</b>	<b>20%</b>

Grades:

Final course grades are straight letter grades and will be given following the scale below:

A	90%-100%
B	80%-89.4%
C	70%-79.4%
D	60%-69.4%
F	<60%

**Student Expectations:**

Attendance:

While it is expected that you will come to class and participate, you will not be graded on your attendance of this course. However, be aware that missing class means you will miss in-class activities (which are a part of your grade) that cannot be made up unless missed for a university- recognized excuse.

Classroom Decorum:

As a courtesy to myself and all other students, please

- (a) *arrive to class on time (if late, be quiet and considerate)*
- (b) *resist the urge to pack up before the end of class*
- (c) *use cell phones/laptops only for their intended class purposes*
- (d) *be civil and understanding of other students' responses or points of view*
- (e) *do not participate in side discussions*
- (f) *do not use offensive language or call people disparaging names*
- (g) *show respect for all students as well as the professor*

Though, it may not be listed above should your behavior become disruptive or not conducive to the learning environment, you will be politely asked to leave.

### Academic Dishonesty:

Also known as “cheating,” academic dishonesty will not be tolerated in this class. Cases of academic dishonesty will be prosecuted in accordance with UW Regulation 6-802. Cheating in this course can result in an “F” in the course, a permanent notice of academic dishonesty in your student citizenship file, or suspension from the University. In this course, academic dishonesty primarily consists of (but is not limited to) unapproved assistance on examinations, including unauthorized notes or electronic devices, copying another student's exam or allowing them to copy from you, copying the homework of others or allowing them to copy from you, plagiarism or other use of published materials without complete citations, or fabrication of referenced information.

It is required that any instance of “cheating” be reported to the head of the department. Cheating on a homework assignment, in-class activities, or exam will be scored as a zero.

### Group Work Policy:

I encourage you to work with other classmates on homework or in-class activities; however, the work you turn in must be your own individual work. Do not simply copy from another person or this will result in failure of the assignment or activity. You will not be allowed to work with students on exams or quizzes.

### Student Services:

If you have a physical learning, or psychological disability and require accommodations, please let me know as soon as possible. You will need to register with, and provide documentation of your disability to University Disability Support Services (UDSS) in SEO, Room 330, Knight Hall.

### **Instructor Expectations:**

As an instructor, I will do my best to treat every student fairly and with respect. My intent is to create an enjoyable learning experience that translates into a conducive learning environment. It is my goal to arrive on time and prepared for class. I will answer all questions to the best of my ability; should I not know the answer, I will follow up with the student or the entire class with an answer in a timely manner. Additionally, I will grade exams, homeworks, and in-class activities as quickly as possible.

### Office Hours or Class Cancellations:

If I need to cancel office hours or class, I will make an announcement via WyoCourses, which will send you an email or text notifying you of the cancellation. Additionally, I will try to have a sign posted on my office door. Should I know with some time in advance that I will be cancelling class or office hours, I will announce in class and on WyoCourses.

## Tentative Schedule

Date	Day	Topic	HW/PD
1/23/18	T	Intermediate Micro Review	
1/25/18	R	Intermediate Micro Review	
1/30/18	T	Chapter 1 - Introduction: Environment and Economics	
2/1/18	R	Chapter 2 - Normative and Positive Economic Analysis	
2/6/18	T	Chapter 3 - How Much Environmental Protection?	HW1 Assigned
2/8/18	R	Chapter 3/4 - Protection, Efficiency and Markets	
2/13/18	T	Chapter 4 - Efficiency and Markets	
2/15/18	R	Chapter 5 - Market Failures	
2/20/18	T	Chapter 5 - Market Failures	HW2 Assigned and PD - Topic Confirmed
2/22/18	R	Chapter 5/6 - Market Failures and Decision Making	
2/27/18	T	Chapter 6/7 - Decisions and Demand for Envr Goods	
3/1/18	R	Chapter 7/8 - Demand and Hedonic Price Methods	
3/6/18	T	Chapter 8 - Sum-Up and Review Day	
3/8/18	R	<b>Midterm: Chapters 1 - 8</b>	
3/13/18	SPRING BREAK NO CLASS		
3/15/18			
3/20/18	T	Presentations I	PD – Outline Due
3/22/18	R	Presentations I	
3/27/18	T	Chapter 9 - Household Production	
3/29/18	R	Chapter 9 - Household Production	
4/3/18	T	Chapter 10 - Constructed Markets	HW3 Assigned
4/5/18	R	Chapter 10/11 - Constructed Mkts and Regulation	
4/10/18	T	Chapter 11/12 - Regulation and Emission Prices and Fees	
4/12/18	R	Chapter 13 - Property Rights	
4/17/18	T	Chapter 13 - Property Rights	PD – Paper Due and HW4 Assigned (maybe)
4/19/18	R	Presentations II	
4/24/18	T	Presentations II	
4/26/18	R	Presentations II	
5/1/18	T	Presentations II	
5/3/18	R	Review Day	
5/8/18	T	<b>Final Exam - Comprehensive 10:15am to 12:15pm</b>	

