

WE 2300.001– Social Impacts of Wind Energy

Fall 2014

Instructor: Travis Roach
Place and Time: Livermore Center 101, MWF 1:00-1:50
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Office Hours: MWF 2:00-3:00, or by appointment
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Reading Material

- The Great Texas Wind Rush: How George Bush, Ann Richards, and a Bunch of Tinkerers Helped the Oil and Gas State Win the Race to Wind Power
 - Authors: Kate Galbraith and Asher Price
- Principles of Environmental Economics and Sustainability: An Integrated Economic and Ecological Approach
 - Author: Ahmed Hussien

Course Description

The proliferation of renewable energy in general, and wind energy in particular, has led to many societal changes that are of interest to historians, economists, and sociologists alike. From this basis, this course explores the topic of wind energy through the many lenses of a social scientist. We will discuss the development of wind power in America and Europe and trace the impacts of this new technology on the relationship between humans and the environment, development and change in emerging economies, evolving issues for public administrators, sustainability, and the growing concern of anthropogenic climate change.

Learning Outcomes

Upon completion of this course, students should be able to:

- Discuss and extrapolate the impact of renewable energy technologies across the product lifecycle: from producing turbines themselves to the generation of electric power.
 - Assessment: Small group discussion, online discussion posts, tests, final project
- Distinguish between the environmental/ecological impacts of wind energy as compared to other sources of energy.
 - Assessment: Team presentations and debate, online discussion posts, tests

- Identify and critique alternative explanations for claims about social issues and human behavior.
 - Assessment: In-class active learning activities, short-answer test questions, final project
- Demonstrate knowledge of the appropriate methods, technologies, and data that social and behavioral scientists use to investigate the human condition.
 - Assessment: In-class active learning activities, homework, discussion posts, tests, final project
- Analyze the national and global issues related to climate change and energy policy
 - Assessment: Daily writing assignments, Final project (discussed below)

Methods of Assessing the Expected Learning Outcomes

The expected learning outcomes for the course will be assessed through exams, in-class application activities, graded and non-graded quizzes, class discussion and participation, daily writing activities, and an end of the year project.

Description of How Grades are Determined

Exams

There will be two midterm exams and a cumulative optional exam during the final exam period at the end of the semester. Each exam will include 4-5 short answer questions. The optional exam at the end of the semester can be taken to lower the weighting of the other midterms. In the case that a student takes the optional test the grade will be calculated following “Grading Track 2.” Otherwise, “Grading Track 1” will be used to determine the final grade.

TED Talk Project

This is a “capstone” type project that will take the place of the traditional final exam. In this project you, and a team of fellow classmates if you choose, will write and present a TED style presentation in which you deeply analyze one major impact that wind power development will have on society. The guidelines for this project are intentionally (very) open-ended. Your project may discuss any step of the production life-cycle, energy policy and sustainability, domestic or foreign issues, etc. This project will be useful as: the beginnings of an honors thesis or capstone paper, or as the starting point from which to present at the undergraduate research conference (<http://bit.ly/12LGmp3>).

Quizzes, Homework

Your quizzes and homework account for 10% of the final grade, regardless of the grading option you choose. Thus, performance on quizzes and homework are critical factors in making an A instead of a B, and so on for C's and D's. Though it differs per person, a good rule of thumb for any class is to invest 3 hours per credit hour of time on preparation and homework. Keep in mind that working hard and “investing” early will pave the way for a comfortable retirement in the future.

<i>Grading Track 1</i>	<i>Grading Track 2</i>
10% - Quizzes, Homework	10% - Quizzes, Homework
20% - TED Talk Project	20% - TED Talk Project
30% - Lowest Midterm	20% - Low Midterm Test
40% - Highest Midterm	25% - High Midterm Test
	25% - Optional Cumulative Exam

Grading Scale

A = 100.00% - 89.50%
B = 89.49% - 79.50%
C = 79.49% - 69.50%
D = 69.49% - 59.50%
F = 59.49% - 0.00%

Examination Calendar

First Exam: Friday October 10th
Second Exam: Friday, November 21st
Optional Exam: ***Cumulative***: Tuesday 12/10 from 4:30-7:00 pm

Notes

Students are expected to assist in maintaining a classroom environment which is conducive to learning. In order to assure that all students have an opportunity to gain from time spent in class, unless otherwise approved by the instructor, **students are prohibited from using cellular phones, eating or drinking in class, making offensive remarks, using laptops for nonrelated class activities, reading newspapers, sleeping or engaging in any other form of distraction.** Inappropriate behavior in the classroom shall result in, minimally, a request to leave class.

Attendance is REQUIRED and will be MONITORED throughout the semester. Incidences of excessive absence will be dealt with in a manner consistent with University policy and procedures.

American with Disability ACT. Any student who, because of a disabling condition, may require special arrangements in order to meet course requirements should contact the instructor as soon as possible to make necessary accommodations. Students should present appropriate verification for Disabled Students Services during the instructor's office hours. Please note that instructors are not allowed to provide classroom accommodations to a student until appropriate verification from Student Disability Services has been provided. For additional information, you may contact the Student Disability Services office in West Hall 335 or by phone at 806-742-2405.

Student Absence for Observation of Religious Holy Days. A student who is absent from classes for the observation of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence if, not later than the fifteenth day after the first day of the semester, the student had notified the instructor of each scheduled class that the student would be absent for a religious holy day.

Students are expected to have their ID's with them in class. The instructor reserves the right to ask a student to show his/her ID, especially during exams.

Any instance of cheating will result in an (F) for the course. The instructor reserves the right to pursue the matter further.