



EBGN 330 - Energy Economics - Section A

Spring 2017

Instructor: Seth Wiggins

Office: Engineering Hall 117

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Office hours: MW 1:15-2:15 p.m. (or by appointment)

Class meeting days/times: MWF 8:00 - 8:50

Class meeting location: Marquez Hall 226

Web Page: Blackboard

Instructional activity: 3 one hour lectures; 3 semester hours

Course description from Bulletin:

Study of economic theories of optimal resource extraction, market power, market failure, regulation deregulation, technological change and resource scarcity. Economic tools used to analyze OPEC, energy mergers, natural gas price controls and deregulation, electric utility restructuring, energy taxes, environmental impacts of energy use, government R&D programs, and other energy topics.

Prerequisites: EBG201

Textbook and/or other requirement materials:

- Required Texts: Carol A. Dahl, International Energy Markets, 2nd edition, PennWell Books. ISBN: 978-1593702915
- Additional required readings will be available through blackboard

Student learning outcomes: At the conclusion of the class students will have:

1. The insight necessary to apply economic tools to the energy industry
2. The ability to identify failures in energy industry markets
3. An understanding of the purpose and effects of regulation in energy markets

Email Policy: Given the size of the class and the volume of email I receive, I must institute the following policy. I reserve the right to ignore any class email with any subject *not* beginning the following: "EBGN 330: ", followed then by the actual subject of your email.

Policy on academic integrity/misconduct: The Colorado School of Mines affirms the principle that all individuals associated with the Mines academic community have a responsibility for establishing, maintaining, and fostering an understanding and appreciation for academic integrity. In broad terms, this implies protecting the environment of mutual trust within which scholarly exchange occurs, supporting the ability of the faculty to fairly and effectively evaluate every student's academic achievements, and giving credence to the university's educational mission, its scholarly objectives and the substance of the degrees it awards. The protection of academic integrity requires there to be clear and consistent standards, as well as confrontation and sanctions when individuals violate those standards. The Colorado School of Mines desires an environment free of any and all forms of academic misconduct and expects students to act with integrity at all times.

Academic misconduct is the intentional act of fraud, in which an individual seeks to claim credit for the work and efforts of another without authorization, or uses unauthorized materials or fabricated information in any academic exercise. Student Academic Misconduct arises when a student violates the principle of academic integrity. Such behavior erodes mutual trust, distorts the fair evaluation of academic achievements, violates the ethical code of behavior upon which education and scholarship rest, and undermines the credibility of the university. Because of the serious institutional and individual ramifications, student misconduct arising from violations of academic integrity is not tolerated at Mines. If

a student is found to have engaged in such misconduct sanctions such as change of a grade, loss of institutional privileges, or academic suspension or dismissal may be imposed.

The complete policy is [online](#).

Grading Procedures: Grades will be based on two midterms, a group project, and a comprehensive final. The course grades will be determined using the following weights and a standard 100 point, plus/minus scale (A: 93-100%, A-: 89.5-92.9%, B+: 87-89.4%, B: 83-86.9%, B-: 79.5-82.9%, C+: 77-79.4%, C: 73-76.9%, C-: 69.5-72.9%, D+: 67-69.4%, D: 63-66.9%, D-: 59.5-62.9%, F: less than 59.4%). I do reserve the right to curve the class at the end of the term, but that curve will only be upwards.

Exams: There will be three exams: two midterms (each worth 25% of the total class grade) and a final (worth 33% of the total grade). Midterm exams will not be cumulative, but the final exam will cover the subject matter of the entire course. Exams will be based directly on lecture material and questions asked during class. Any missed exam will receive a grade of zero, no make-ups will be given.

Group Project: Small groups of students towards the end of the term will complete a group project a select topic relevant to energy economics. In-class presentations will be made the final two weeks of the course. Projects are worth 17% of the total class grade, and are due **April 24th**. More details will follow later in the term.

Coursework Return Policy: Exams will be graded and returned within one week.

Absence Policy: Attendance is not required, but highly recommended. In the event a student misses a class, he/she is responsible for all material covered in class, including all assignments and announcements.

Please be familiar with the Attendance Policy for the Colorado School of Mines: (<http://inside.mines.edu/Student-Absences>). In general, makeups will only be given if the student meets the criteria in the CSM policy.

Detailed Course Schedule (Subject to Change):

Week:	Date:	Lecture Topic:	Chapter(s):
1	Jan 10 - 13	Introduction, Supply/demand Model, Forecasting	1, 2
2	Jan 16th	Martin Luther King Day, No Class	
2	Jan 18 - 20	Coal Industry, Perfect Competition	3
3	Jan 23 - 27	Energy Price Controls, Taxes, Subsidies, and Social Welfare	4
4	Jan 30 - Feb 3	Externalities and Energy Production	11
5	Feb 6 - 8	Public Goods and Global Climate Change	12
5	Feb 10	Midterm #1	
6	Feb 13 - 17	Natural Monopoly and Electricity Markets	5
7	Feb 20	President's Day, No Class	
7	Feb 22 - 24	Restructuring in the Electricity Sector	6
8	Feb 27 - Mar 3	Monopoly, Dominant Firm, and OPEC	7
9	Mar 6 - 10	Markey Structure, Transaction Cost Economics, and US Natural Gas Markets	8
10	Mar 13 - 17	Game Theory and the European Natural Gas Market	10
11	Mar 20 - 22	Allocating Fossil Fuel Production over Time and Oil Leasing	14
11	Mar 24	Midterm #2	
	Mar 25 - Apr 2	Spring Break - No Class	
12	April 3 - 7	Energy Futures Markets and Managing Risk	18
13	April 10 - 14	Energy Futures Markets and Managing Risk, Continued	18
13	April 12	Last Day to Withdrawal (continuing students)	
14	April 17 - 21	TBD - Either Course Makeup or Material Based on Students' Interests	
15	April 24	Projects Due	
15	April 24 - 28	Project Presentations	
16	May 1 - 5	Project Presentations, Dead Week	
17	May 6, 8-11	Finals - Time and Location TBA	