Syllabus Fall 2011
EBGN 330/ENGY 330 Energy Economics
Division of Economics and Business
Colorado School of Mines

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Office Hours: Wednesdays 5:00PM to 6:00PM or by appointment


Class Structure: Two lectures per week, Mondays and Wednesdays 6:00 PM to 7:15 PM, Room 202 Hill Hall. Energy economics is the application of micro-economic principles to the energy sector. You will learn the fundamentals necessary to evaluate energy markets from an economic and financial perspective. This course will cover a variety of theoretical and empirical topics related to energy demand and supply, evaluation of the economic feasibility of energy projects, comparison of the economics of various energy sources, environmental consequences, and regulation of energy markets.

I will rely primarily on the textbook, but will provide updated supplemental information to expand upon the concepts presented in class and provide more current information. This course will focus on the characteristics of various energy markets, how these characteristics affect economic efficiency goals, approaches to evaluating the welfare effects of these market characteristics, and policies that can be used to address market failures. It is important that you attend class on a regular basis because the lectures will expand upon and add to the concepts in the textbook. It is assumed that all students have knowledge of basic micro-economic principles.

Prerequisites: Principles of Economics EBGN201 or equivalent.

Grading: Your grade will be based upon three exams and several quizzes and homeworks over the semester. The final exam will be comprehensive and quizzes will be on Wednesdays (first quiz will be Wed. Sept 7th). You will be allowed to drop a total of three homeworks or quizzes combined over the semester to account for necessary absences and conflicts. Since this is a large class most of the exam questions will be multiple choice, very short answer, or worked problems rather than essay type questions.
Grading weights and percentages:
Exam 1: 20% of grade
Exam 2: 20% of grade
Final Exam: 25% of grade
Quizzes and homeworks: 35% of grade

A - 90% and above
B - 80% to 89%
C - 70% to 79%
D - 60% to 69%

EBGN 330: General Course Outline

I. Introduction: Overview and expectations, importance of energy economics and policy, basic concepts (August 24th and August 29th – Chapter 2)

II. Perfect competition, natural monopoly, monopoly, cartel behavior, dominant firm, regulation and deregulation, the coal industry, natural gas, electricity, transaction cost economics (August 31st thru September 19th – Chapters 3, 4, 5, 6, and 7)
   • First in-class Exam – Wednesday September 21st

III. Externalities, public goods, game theory, allocating non-renewable fuel resources over time, peak oil, net energy (September 26th thru October 31st – Chapters 8, 9, 11, 12, plus supplemental readings)
   • Fall Break October 17th
   • Second in-class exam Wednesday November 2nd

IV. Supply and cost curves, refining and transportation, futures and options, other topics (November 7th thru December 5th – Chapters 13, 14, 15, plus supplemental readings)
   • Thanksgiving break November 23rd
   • Final Exam – Dec. 10 or week of December 12th