

Department of Economics Course Outline

Term: Fall 2005/Winter 2006

Course: Economics 494

[Applied Energy Economics II]

Section: 01

Time: W 15:00 ? 17:50

Place: SA 121 (subject to change)

Instructor: Dr. A. J. MacFadyen

Office: SS 540 **Telephone:** 220-4094

Office Hours: MW 12:00-13:00 E-Mail: macfadye@ucalgary.ca

W 14:00-15:00 or by appointment

Textbook(s):

None

During the course we will work our way through a number of prominent, largely government sponsored, studies of various energy issues. The exact documents utilized will be specified during the term, but will likely include:

-US, Department of Energy, Energy Information Administration (EIA), **Oil Market Basics** (http://www.eia.doe.gov/pub/oil_gas/petroleum/analysis_publications/oil_market_basics/%20default.html)

-Canada, National Energy Board (NEB), **Canada's Energy Future: Scenarios for Supply and Demand to 2025** http://www.neb.gc.ca/energy/SupplyDemand/2003/index_e.htm)

Alberta Energy and Utilities Board (EUB), **Alberta's Reserves 2003 and Supply/Demand Outlook 2004-2013** (http://www.eub.gov.ab.ca/bbs/products/STs/st98_current.pdf)

-EIA, **Documentation of the Oil and Gas Supply Model, 2004** (http://tonto.eia.doe.gov/FTPROOT/modeldoc/m063(2004).pdf)

-EIA, International Energy Outlook, 2004 (http://www.eia.doe.gov/oiaf/ieo/download.html)

- -International Energy Agency (IEA) Monthly Oil Market Report (latest) (http://omrpublic.iea.org/)

 -EIA Derivatives and Risk Management in the Petroleum, Natural Gas, and Electricity Industries ? 2002 (http://www.eia.doe.gov/oiaf/servicerpt/derivative/index.html)

 -NEB, Canada's Oil Sands: Opportunities and Challenges to 2015 May 2004

 http://www.neb.gc.ca/energy/EnergyReports/EMAOilSandsOpportunitiesChallenges2015/EMAOilSandsOpportunities2015C)

 -IEA, Roadmapping Coal?s Future (http://www.iea.org/textbase/papers/2005/roadmapping.pdf)

 -IEA, Alternative Fuels An Energy Technology Perspective (http://www.iea.org/textbase/papers/2005/ETOAltFuels05.pdf)
- -IEA, Mobilizing Energy Technology (http://www.iea.org/textbase/nppdf/free/2005/MobilsingEnergyTech_WEB.pdf)

Books on Reserve:

None

Course Objectives:

This course, and the companion course Economics 492, is designed to provide students in the Applied Energy Program with the opportunity to undertake research in energy economics. The course will introduce students to sources of information on energy industries and markets and to economic concepts commonly utilized by energy economists. Students will undertake individual and group projects on a number of issues in energy economics, receiving practice in preparing written reports and making verbal presentations. This course will concentrate on topics related to crude oil and refined petroleum, coal, renewable energy products, energy consumption and conservation, and environmental aspects of energy production and utilization.

Course Outline:

- Petroleum (Oil)
 - -The Crude Oil Industry (Exploration, Development and Lifting)
 - -Oil Transmission
 - -Refining and Marketing
- Energy Demand
- Coal
- Renewable Energy
- Energy and the Environment

Grade Determination and Final Examination Details:

There will be no final examination in this course.

The grade will be determined as follows:

- -Class Participation???????.....10%
- -Take-home Assignments??????.15%
- -Individual and Group Projects (Five)?.?..75%

A passing grade on any particular component of the course is not required for a student to pass the course as a whole.

Projects and assignments are marked on a numerical (percentage) basis, then converted to letter grades. The course grade is then calculated using the weights indicated above, as applied to the percentage grades. As a guide to determining standing, these letter grade equivalences will generally apply:

A+	92-100	B+	76-79	C+	61-64	D+	46-49
A	84-91	В	69-75	C	54-60	D	40-45
A-	80-83	B-	65-68	C-	50-53	F	0-39

If, for some reason, the distribution of grades determined using the aforementioned conversion chart appears to be abnormal the instructor reserves the right to change the grade conversion chart if the instructor, *at the instructor's discretion*, feels it is necessary to more fairly represent student achievement.

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Society of Undergraduates in Economics (S.U.E.)

www.fp.ucalgary.ca/econ

Notes:

- Students seeking reappraisal of a piece of graded term work (term paper, essay, etc.) should discuss their work with the Instructor *within* fifteen days of the work being returned to the class.
- Make-up examinations and deferred examinations will not be given <u>except in cases of extreme personal emergencies</u>. Also, examinations will not be given <u>before</u> the indicated dates.
- Students?s assignments will be returned during regular class time or at the time of the final exam. Papers may also be picked up by students during regular office hours.

Safewalk / Campus Security: 220-5333

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