

MACQUARIE UNIVERSITY

Division of Economic and Financial Studies



UNIT OUTLINE
2007 Second Semester

ECON 887
ENERGY ECONOMICS AND FINANCE
<http://www.econ.mq.edu.au/postgraduate/units/econ887>

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ECON887

Energy Economics and Finance

Course Overview

The focus of ECON887 is the study of the economics of the energy industry, including interactions among the main competing fuel sectors. We will focus primarily on primary energy sectors, rather than end-use sectors. It will combine economic geography, economic theory, industry study, and the interface of the energy sectors with the financial sector. It will include production, transportation, processing, financing, risk management, and concepts and issues of energy security.

Teaching Program

ECON887 will be delivered as a combination of lectures and classroom discussions.

Lecturer	Class Location	Class Time	Contact	Consultation Times
Dr. Ronald D. Ripple	C5A 310	Monday: 6pm-9pm	Office: E4A 411 Phone: 9850 7063 Email: rripple@efs.mq.edu.au	Wednesday: 2pm-4pm

The class sessions will be conducted primarily as lectures, with practical examples and problems introduced where appropriate.

The text for this class is:

Dahl, Carol A. (2004) *International Energy Markets: Understanding Pricing, Policies, and Profits*, PennWell Corporation, Tulsa, Oklahoma.

Also, visit <http://dahl.mines.edu> for some additional related readings and an errata sheet for the book. The energy data links near the bottom of the page is quite useful to anyone interested knowing where to find energy data.

Set chapters for each topic's lecture are drawn from this text and identified in the lecture topic table below. Other materials, such as relevant journal articles, will be provided as we move through the material. Students should read these chapters and other materials prior to the lecture, so that they are familiar with the material to be covered. This should greatly enhance your learning experience.

Occasionally, I will place problem sets on the WebCT that are associated with the material covered in the lectures and text. These will be for your practice, and they will not be part of your unit assessment. Nevertheless, problems that will make it to the exam may well look quite similar to many of the problems provided.

Other reference texts may be found in the library. Several have been placed in Reserve, such as:

Adelman, Morris (1993) *The Economics of Petroleum Supply*, The MIT Press, Cambridge, Massachusetts.

Odell, Peter (2004) *Why carbon fuels will dominate the 21st century's global energy economy*, Multi-Science Publishing Co., Brentwood.

Odell, Peter (1963) *An economic geography of oil*, Bell, London.

Drew, Lawrence (1997) *Undiscovered petroleum and mineral resources: assessment and controversy*, Plenum Press, New York.

These readings obviously focus primarily on oil markets, and I will provide references to other energy sectors as we go forward, as well as journal articles for related topics.

Course Calendar

Topic /week No.	Class meeting:	Topic	Chapters
1	30 July	Introduction	1
2	6 August	Models – Math	2
3	13 August	Coal : Competition	3
4	20 August	Natural gas – Japan : Monopsony	10
5	27 August	Natural gas – Europe – N. America. : Game Theory, Competition, and Transaction	11 & 7
6	3 September	Oil – OPEC – Monopoly	6
7	10 September	Fossil fuel production – Peak Oil	12
Mid-semester Break			
8	1 October	Public Holiday: No class!	
9	8 October	Supply and cost curves	13
10	15 October	Refining and transportation	14
11	22 October	Futures and options and risk management	15
12	29 October	Resource valuation: Real options, etc.	
13	5 November	Externalities – Climate change	8 & 9

Important Dates for the Semester

- The essay assignment is due 2 November 2007.
- The examination will be held during the examination period.

Course Assessment

Assessment will be based on a semester assignment and an examination, with the following weights:

Essay assignment	30%
Examination	70%

The final exam MUST be passed for you to gain a passing mark in this unit.

Assignment

The semester assignment is a 3,000 word essay. **The essay assignment is to be submitted by 4PM on 2 November 2007.** The assignment is to be submitted to the ECON887 boxes in

ERIC (E4B). The specific essay topic will be provided in a separate handout, and on the WebCT unit homepage. All students must submit an essay; no essay, no pass.

NO LATE SUBMISSIONS WILL BE ACCEPTED!

The essay must be submitted using the official cover sheet, with the plagiarism declaration **signed**. These will be available on the WebCT page. You should keep a dated, witnessed copy of your assignment in the case of any mishandling. This is YOUR responsibility.

The Examination: It will be set over a three-hour duration.

Plagiarism

The University defines plagiarism in its rules: “Plagiarism involves using the work of another person and presenting it as one’s own.” Plagiarism is a serious breach of the University’s rules and carries significant penalties. You must read the University’s practices and procedures on plagiarism. These may be found in the *Handbook of Undergraduate Studies* or on the web at : <http://www.student.mq.edu.au/plagiarism/>

The policies and procedures explain what plagiarism is, how to avoid it, the procedures that will be taken in cases of suspected plagiarism, and the penalties if you are found guilty. Penalties may include a deduction of marks, failure in the unit, and/or referral to the University Discipline Committee.

University Policy on Grading

The Academic Senate has a set of guidelines on the distribution of grades across a range from fail to high distinction. Your final result will include one of these grades plus a standardized numerical grade (SNG).

On occasion your raw mark for a unit (i.e., the total of your marks for each assessment item) may not be the same as the SNG which you receive. Under the Senate guidelines, results may be scaled to ensure that there is a degree of comparability across the university, and so that students with similar performances compared with past students should achieve similar results.

For an example of the policy see

<http://www.mq.edu.au/senate/MQUonly/Issues/Guidelines2003.doc> or
<http://www.mq.edu.au/senate/MQUonly/Issues/detailedguidelines.doc>

Student Support Services

Macquarie University provides a range of Academic Student Support Services. Details of these can be accessed at <http://www.student.mq.edu.au>.

Special consideration and grade appeals

All such matters and issues will be addressed according to EFS Division guidelines.

http://www.efs.mq.edu.au/student_support/important_processes/special_consideration
http://www.efs.mq.edu.au/student_support/important_processes/important_processes_grade_appeal_and_exam_script_viewing