

## ECO 414S/3502S: Energy and Regulation

**CALENDAR DESCRIPTION:** This course surveys important features of energy markets and related environmental challenges. One of the central objectives is to provide an understanding of the key economic tools needed to analyse these markets. A related objective is the development of a framework for understanding the public discourse on energy and the environment. Topics include the theoretical and empirical tools necessary to analyse energy markets, the politics and history of energy, the hydrocarbon economy (oil, natural gas and coal), electricity markets, global warming and other externalities, renewable energy, conservation, carbon taxes and 'cap-and-trade'.

Prerequisites: ECO200Y1/ECO204Y1/ECO206Y1,  
ECO220Y1/ECO227Y1/(STA247H1,STA248H1)/(STA250H1,STA255H1)/(STA257H1,STA261H1)  
Distribution Requirement Status: This is a Social Science course  
Breadth Requirement: Society and its Institutions (3)

**LOCATION AND TIME:** Mondays 2-4 UC 328

### EVALUATION:

Classroom Participation	10%	
Final Exam	40%	Exam period
Paper	50%	Due Monday March 25, 2013. Late submissions penalized 10% for each day late.

The only generally acceptable reason for missing an exam or term test is illness. A medical certificate is required. We are asked to remind you that plagiarism and cheating are **serious** academic offences with potentially serious penalties.

**Paper: Thursday, March 28, 2013. This is a hard deadline. Late submissions will be penalized 10% per day.** Please submit the paper electronically as an attachment, and name the file using your name. For example, my paper would be "YatchewPaper.pdf".

- Undergraduates taking the course may write an overview paper analysing an energy topic of interest.
- Graduate students taking the course are required to include some empirical analysis in their paper. They will also be required to make a short presentation of their paper during class (on March 25 or April 1 2013). The presentation will be assessed in determining the grade for the paper.

**Problem Sets:** There will also be problem sets. You are not required to submit them. If you choose to do so, they will be considered in marginal cases. Please submit electronically as an attachment and name the file using your name. For example, my problems would be "YatchewProblems.doc" or "YatchewProblems.pdf".

## **COURSE MATERIALS**

All items marked with an asterisk \* are available electronically through University of Toronto Libraries.

### Required:

David Buchan, *The Rough Guide to the Energy Crisis*, Rough Guides, 2010

Richard Muller, *Energy for Future Presidents, The Science Behind the Headlines*, Norton 2012

### Recommended:

Daniel Yergin, *The Quest*, The Penguin Press, 2011

### Additional References:

Carol Dahl, *International Energy Markets*, PennWell, 2004.

Joseph Dukert, *Energy*, Greenwood Press, 2009.

Subhes Bhattacharyya, *Energy Economics*, Springer, 2011. \*

## **LECTURE TOPICS**

1. Background and Introduction
2. Energy in World History
3. Economic Tools: Theory and Empirical Analysis.
4. Global Warming and Other Externalities
5. Regulation and Government Intervention
6. Oil, Natural Gas and Coal
7. Electricity