



APPLIES TO ACADEMIC YEAR 2009/2010

GRA 5911 Energy Economics

Programme

Master of Science in Business and Economics, Master of Science in Political Economy, Specialization Course

Responsible for the course

Department

Department of Innovation and Economic Organisation

Term

According to study plan

ECTS Credits

6

Language of instruction

English

Introduction

Learning outcome

The course aims at giving students a comprehensive analytical introduction to energy issues, meaning oil, gas and electricity economics, including the policy and institutional framework. The course will also treat related environmental issues, OPEC, oil trading and oil price formation, North Sea oil policies, as well as EU regulatory policies.

Prerequisites

A bachelors degree in business or eq.

Compulsory reading

Books:

Dahl, Carol A. 2004. International energy markets : understanding pricing, policies, and profits. Tulsa, Okla.: PennWell

Noreng, Øystein. 2006. Crude power : politics and the oil market. New ed. London : I.B. Tauris

Smil, Vaclav. 2003. Energy at the crossroads : global perspectives and uncertainties.

Cambridge, Mass. : MIT Press

Articles:

Jesse, Jan-Hein og Coby van der Linde. June 2008. Oil Turbulence in the Next Decade. An Essay on High Oil Prices in a Supply-Constrained World. Clingendael International Energy programme, netherlands Institute of International Relations

Collection of articles:

Selected articles from scientific journals, such as The Energy Journal, Energy Policy as well as book chapters.

Other:

-During the course there may be hand-outs and other material on additional topics relevant for the course and the examination.

Hand-outs in each lecture, posted on Blackboard

Recommended reading

Books:

Andersen, Svein S. 1993. The struggle over North Sea oil and gas : government strategies in Denmark, Britain and Norway. Oslo : Scandinavian University Press. 1-33 and 167-190

Antill, Nick and Robert Arnott. 2002. Oil company crisis : managing structure, profitability and growth. Oxford: Oxford Institute for Energy Studies. 79

Cordesman, A.H. and K.R. Al-Rodhan. 2006. The global oil market : risks and uncertainties.

Washington, D.C. : Center for Strategic and International Studies (CSIS)
 Davis, Jerome, ed. 2006. The Changing world of oil : an analysis of corporate change and adaptation. Aldershot : Ashgate
 Ebel, Robert E.. 2005. China's energy future : the Middle Kingdom seeks its place in the sun. Washington: CSIS. 86 p.
 Falola, Toyin and Ann Genova. 2005. The politics of the global oil industry : an introduction. Westport, Conn. : Praeger. 3-61
 Finon, Dominique and Atle Middtun, eds. 2004. Reshaping European gas and electricity industries : regulation, markets and business strategie. Amsterdam: Elsevier
 Grace, John D. 2005. Russian oil supply : performance and prospects. Oxford : Published by the Oxford University Press for the Oxford Institute for Energy Studies. 1-13, 65-103, 178-234
 Hoopes, Stephanie M. 1997. Oil privatization, public choice and international forces. Houndmills, Basingstoke: MacMillan. 1-36 and 82-138
 Hunt, Sally. 2002. Making competition work in electricity. New York: Wiley
 Johnston, Daniel. 2003. International exploration economics, risk, and contract analysis. Tulsa, Okla: PennWell. 251 p
 Marcel, Valerie. 2006. Oil titans : national oil companies in the Middle East. London: Chatham House. 54-169
 Maugeri, Leonardo. 2006. The age of oil : the mythology, history and future of the world's most controversial resource. Westport, Conn.: Praeger. s. 201-272
 Middtun, Atle and Eirik Svindland, ed.. 2001. Approaches and dilemmas in economic regulation : politics, economics and dynamics. Houndsmill: Palgrave
 Mitchell, John V.. 2001. The new economy of oil : impacts on business, geopolitics and society. London: Earthscan
 Noreng, Øystein. 2006. Crude power : politics and the oil market. New ed. London: I.B. Tauris. ch. 3
 Noreng, Øystein. 2006. Crude power : politics and the oil market. New ed. London: I.B. Tauris. ch. 4
 Rogers, Jim. 2007. Hot commodities : how anyone can invest profitably in the world's best market. Chichester : Wiley. 120-153
 Rutledge, Ian. 2005. Addicted to oil : America's relentless drive for energy security. London : I.B. Tauris. 1-20, 37-68, 120-157
 Schipper, Lee and Stephen Myers. 1992. Energy efficiency and human activity : past trends, future prospects. Cambridge : Cambridge University Press
 Smil, Vaclav. 2003. Energy at the crossroads : global perspectives and uncertainties. Cambridge, Mass. : MIT Press. 1-120 and 181-238.
 Stern, Jonathan P. 1998. Competition and liberalization in European gas markets. London : Royal Institute of International Affairs. 1-109
 Stern, Jonathan P. 2005. The future of Russian gas and Gazprom. Oxford : Oxford University Press. 1-63, 201-222
 Stoft, Steven. 2002. Power system economics : designing markets for electricity. Piscataway, N.J. : IEEE Press
 Yergin, Daniel. 1991. The Prize : the epic quest for oil, money, and power. New York : Simon and Schuster. Ch. 3,6,31

Articles:

Noreng, Øystein. 2001. The World Natural Gas Market and Its Implications for the World Oil Market. I: The Future of Natural Gas in the World Energy Market. Abu Dhabi : The Emirates Center for Strategic Studies and Research

Journals:

Osmundsen, Petter; Asche, Frank; Misund, Bård; Mohn, Klaus. 2006. "Valuation of International Oil Companies". Energy Journal. Vol. 27 Issue 3. 49-64, 16
 Andersen, Svein S, in, eds. Svein S. Andersen and Kjell. A. Eliassen. London 2001. "Energy policy: Interest interaction and supranational authority". Making Policy in Europe. Second Edition
 Asche, Frank; Osmundsen, Petter; Sandsmark, Maria. 2006. "The UK Market for Natural Gas, Oil and Electricity: Are the Prices Decoupled?". Energy Journal. Vol. 27 Issue 2. 27-40, 14
 Bachmeier, Lance J.; Griffin, James M. 2006. "Testing for Market Integration Crude Oil, Coal, and Natural Gas.". Energy Journal. Vol. 27 Issue 2. 55-71, 17
 Barker, Terry; Ekins, Paul. 2004. "The Costs of Kyoto for the US Economy". Energy Journal. Vol. 25 Issue 3. 53-71, 19p, 2 charts
 Claes, D.H.. 2003.. 'Globalization and the state oil companies: The case of Statoil'. Journal of Energy and development. Vol. 29, No 1
 Ewing, Bradley T.; Hammoudeh, Shawkat M.; Thompson, Mark A.. 2006. "Examining Asymmetric Behavior in US Petroleum Futures and Spot Prices". Energy Journal. Vol. 27

Issue 3. 9-23, 15

Fischer, Carolyn; Morgenstern, Richard D., 2006. "Carbon Abatement Costs: Why the Wide Range of Estimates?". *Energy Journal*. Vol. 27 Issue 2. 73-86, 14

Fouquet, Roger; Pearson, Peter J. G. 2006. "Seven Centuries of Energy Services: The Price and Use of Light in the United Kingdom (1300-2000)". *Energy Journal*. Vol. 27 Issue 1. 139-177, 39

Fri, Robert W.. 2003. "The Role of Knowledge: Technological Innovation in the Energy System". *Energy Journal*. Vol. 24 Issue 4. 51-74, 24

Gately, Dermot

. 2007. "What Oil Export Levels Should We Expect From OPEC?". *Energy Journal*. Vol. 28, Issue 2

Gately, Dermot. 2004. "OPEC's Incentives for Faster Output Growth". *Energy Journal*. Vol. 25 Issue 2. 75-96, 22

Griffin & Teece. 1982. "Elements of the Crude Oil Production Decision: Implication from Economic Theory" and "Models of OPEC behavior". *OPEC Behavior and World Oil Prices*,. George Allen & Unwin. 13-35

Griffin, James M.; Schulman, Craig T.. 2005. "Price Asymmetry In Energy Demand Models: A Proxy for Energy-Saving Technical Change?". *Energy Journal*. Vol. 26 Issue 2. 1-21, 21p, 3 charts, 4 graphs

Hammar, Henrik; Löfgren, Åsa; Sterner, Thomas. 2004. "Political Economy Obstacles to Fuel Taxation". *Energy Journal*. Vol. 25 Issue 3. p1-17, 17p, 2 charts, 4 graphs

Joskow, Paul L. 2003. "Energy Policies and Their Consequences After 25 Years". *Energy Journal*. Vol. 24 Issue 4. 17-49, 33

Kaufmann, Robert K.; Dees, Stephane; Karadeloglou, Pavlos; Sanchez, Marcelo. 2004. "Does OPEC Matter? An Econometric Analysis of Oil Prices". *Energy Journal*. Vol. 25 Issue 4. 67-90, 24

Kuper, Gerard H.; van Soest, Daan P.. 2006. "Does Oil Price Uncertainty Affect Energy Use?". *Energy Journal*. Vol. 27 Issue 1. 55-78, 24

March 11 2007. 'The new seven sisters'. *Financial Times*

Murillo-Zamorano, Luis R.. 2005. "The Role of Energy in Productivity Growth: A Controversial Issue?". *Energy Journal*. Vol. 26 Issue 2. 69-88, 20

Newbery, David. 2005. *Energy Journal*. Vol. 26 Issue 3. 1-39, 39

Smith, James L. 2005. *Energy Journal*. Vol. 26 Issue 4. 53-68, 16p, 4 graphs

Smith, James L. 2005. "Inscrutable OPEC? Behavioral Tests of the Cartel Hypothesis". *Energy Journal*. Vol. 26 Issue 1. 51-82, 32

Wirl, Franz; Kujundzic, Azra. 2004. "The Impact of OPEC Conference Outcomes on World Oil Prices 1984-2001". *Energy Journal*. Vol. 25 Issue 1. 45-62, 18

Collection of articles:

Nore, Petter. Oslo 2003. Norsk Hydro's Takeover of Saga Petroleum in 1999,. BI Norwegian School of Management

Other:

Kroes, N.. 2006. 'Cross border mergers and energy markets'. vol. 4- issue 4 November 2006. At: www.gasandoil.com/ogel/

Mayer, S.. 2006. 'EU's international energy security policy since the end of the cold war: origins and developments. vol. 4- issue 4 November 2006. At: www.gasandoil.com/ogel/

November 2005. EU-Russia dialogue'. *Euractiv*

: Reynolds, D.B. and Kolodziej, M.. 'Institutions and the supply of oil: A case study of Russia'. U of Alaska, Fairbanks.. Case material

Course outline

Theme:

1. Energy Introduction
2. Energy, the Environment and Renewables
3. Energy Demand
4. Energy Trading and Price Formation
5. Energy Taxation
6. The Oil Market and Business
7. OPEC, Oil Supplies and Prices
8. The Natural Gas Business
9. The Electricity Markets and Business
10. Energy Cimpnay Analysis
11. Regulating Energy Industries
12. Regulating Energy Marketsy

Computer-based tools

Blackboard/homepage

Learning process and workload

36 hours of lecture.

Please note that while attendance is not compulsory in all courses, it is the student's own responsibility to obtain any information provided in class that is not included on the course homepage/Blackboard or text book.

Examination

A three-hour written exam and a term paper, each weighing 50 %.

The term paper can be written individually or in groups of two or three students.

All parts of the evaluation must be passed in order to obtain a grade in the course.

Specific information regarding student evaluation beyond the information given in the course description will be provided in class. This information may be relevant for requirements for term papers or other hand-ins, and/or where class participation can be one of several elements of the overall evaluation.

Exam code(s)

GRA 59114 accounts for 100% of the final grade in the course GRA 5911.

Examination support materials

BI approved exam calculator. BP Statistical Review of World Energy (<http://www.bp.com>), a bilingual dictionary.

Exam aids at written examinations are explained under exam information in our web-based Student handbook. Please note use of calculator and dictionary.
<http://www.bi.edu/studenthandbook/examaids>

Re-sit examination

Re-takes are only possible at the next time a course will be held. When the course evaluation has a separate exam code for each part of the evaluation it is possible to retake parts of the evaluation. Otherwise, the whole course must be re-evaluated when a student wants to retake an exam. Retake examinations entail an extra examination fee.

Additional information**Honor Code**

Academic honesty and trust are important to all of us as individuals, and represent values that are encouraged and promoted by the honor code system. This is a most significant university tradition. Students are responsible for familiarizing themselves with the ideals of the honor code system, to which the faculty are also deeply committed.

Any violation of the honor code will be dealt with in accordance with BI's procedures for cheating. These issues are a serious matter to everyone associated with the programs at BI and are at the heart of the honor code and academic integrity. If you have any questions about your responsibilities under the honor code, please ask.