

Economics 327(L01) (PETROLEUM ECONOMICS)

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Lecture Location: ST132
Lecture Days/Time: MWF 11--11:50

Office: SS 332
Office Hours: MWF 11:50--12:30

(Fall 2019)

Course Description:

Crude oil production and markets in North America and globally. Refining economics and markets for refined products. Government policy including royalty regimes, trade quotas, transport infrastructure, conservation and the environment.

Course Outcomes:

- Students shall learn to apply the simple analytics of oil price determination to historical international oil prices;
- Students shall become familiar with major sources of data on the international petroleum industry;
- Students shall become proficient in the application of the following concepts in the context of the petroleum industry: demand, supply, perfect and imperfect competition, and profit maximizing allocation of an exhaustible resource stock;
- Students shall become knowledgeable of major events in the evolution of the economics of the world crude oil market from 1900 to the present, with particular emphasis on the years since the formation of OPEC in 1960, and the commoditization of the oil market since 1980, and the evolution of the National Oil Companies that now control some ninety percent of the world's oil reserves;
- Students shall become familiar with the petroleum refining sector, the transportation of petroleum products, and the market for finished products in an international context;
- Students shall become familiar with government oil industry policy: royalty regimes and taxes, transport infrastructure, trade restrictions;
- Students shall become familiar with government environmental policy as applied to the petroleum industry: conservation, renewable fuels mandates, effluent pricing, reclamation and clean-up;
- Students shall develop the skills necessary for the critical evaluation of news stories about the international petroleum industry.

Course Outline:

The course will introduce students to petroleum economics assuming no knowledge beyond principles-level (Econ 201) economics. The course materials and lectures will focus on the international crude oil market.

Course coverage will include, but is not limited to, the following:

- A review of the simple analytics of oil price determination and the history of international oil prices;
- Review of major sources of data on the international petroleum industry;
- Review of demand, supply, perfect and imperfect competition, and profit maximizing allocation of an exhaustible resource stock;
- Survey of major events in the evolution of the economics of the world crude oil market from 1900 to the present, with particular emphasis on the years since the formation of OPEC in 1960, and the commoditization of the oil market since 1980, and the evolution of the National Oil Companies that now control some ninety percent of the world's oil reserves;
- Overview of the refining sector, the transportation of petroleum products, and the market for finished products in an international context;
- Overview of government oil industry policy: royalty regimes and taxes, transport infrastructure, trade restrictions;
- Overview of government environmental policy as applied to the petroleum industry: conservation, renewable fuels mandates, effluent pricing, reclamation and clean-up;
- Develop in students the skills necessary for the critical evaluation of news stories about the international petroleum industry.

Prerequisites/corequisites:

ECON 201.

Required Textbook(s):

Coursepack available for purchase from *Bound and Copied*.

Recommended Textbook(s):

None.

Books on Reserve:

1. Adelman, M.A. *The Genie out of the Bottle: World Oil Since 1970*. MIT Press, 1995.
2. Adelman, M.A. *The Economics of Petroleum Supply*. MIT Press, 1993.
3. Parra, Franciosco. *Oil Politics*. I.B. Tauris, 2004.
4. Frank, H.J. (ed.) *The World Petroleum Market: Past & Future*. International Association of Energy Economists, 1994.
5. Simmons, Matthew R. *Twilight in the Desert: The Coming Saudi Oil Shock and the World Economy*. Wiley, 2005.
6. Yergin, Daniel. *The prize: The Epic Quest for Oil, Money & Power*. Free Press, 1992.
7. Sampson, Anthony. *The Seven Sisters: The Great Oil Companies and the World They Made*. Viking Press, 1975.
8. Horsnell, P. and R. Mabro. *Oil Prices and Markets*. Oxford University Press, 1997.
9. Stevens, Paul (ed.) *The Economics of Energy*. Volumes I and II, Edward Elgar, 2000
10. Adelman, M.A. *The World Petroleum Market*. Johns Hopkins Univ. Press, 1973.
11. Watkins, G. Campbell. *Petro makets: Probing the economics of continental energy*. Fraser Inst. 1989.
12. Hannesson, Rognvaldur, *Petroleum Economics: Issues and Strategies of Oil and Natural Gas production*. Quorum Books, 1998.
13. Marcel, Valerie. *Oil Titans*. Brookings Institution, Washington DC, 2006.
14. Pennwell Books. *International Petroleum Encyclopedia*. Pennwell Publications, Tulsa OK, 2007.
15. Maugeri, Leonardo. *The Age of Oil*. Lyons Press, 2007.

Desire2Learn:

This course will make use of the Desire2Learn (D2L) platform. Students who are registered in the course can log on at <http://d2l.ucalgary.ca> through their student centre. Please note that D2L features a class e-mail list that may be used to distribute course-related information. These e-mails are sent to your University of Calgary e-mail addresses only.

Grade Determination and Final Examination Details:

In-class Quizzes (3 @ 10% each)	30%
Term Paper	30%
Final Examination (comprehensive)	40%

	100%

IMPORTANT COURSEWORK DATES

The in-class quizzes are scheduled for the following dates:

Quiz 1 -- Friday October 4th
Quiz 2 -- Friday November 8th
Quiz 3 -- Friday November 29th

The term paper is due by 4 PM on Wednesday December 4th and may be handed in at the Economics Department Main Office located on the 4th floor of Social Sciences.

(Scores on later papers will be reduced by a flat 10 percentage points per day until the day of the final exam. Term papers may not be handed in after the final exam.)

The official grading system will be used. See <http://www.ucalgary.ca/pubs/calendar/current/f-1-1.html>.

Students must receive a passing grade on the final exam to pass the course.

If a student's letter grade on the final exam exceeds their midterm(s) letter grade, the weight of the midterm(s) is (are) transferred to the final exam. The student must have written the midterm(s) or provided supporting documentation for the absence(s) such as a medical note or statutory declaration.

As per the Writing Across the Curriculum Statement in the Calendar, writing and grading thereof will be a factor in the evaluation of student work. See <https://www.ucalgary.ca/pubs/calendar/current/e-2.html>.

Any student work which remains undistributed after the last day of classes will be available to students during the instructor's office hours until the end of the academic term in which the course has been offered. After that time uncollected term work will be discarded.

The final examination will be comprehensive, scheduled by the Registrar, held in a classroom, and last 2 hours. If a student cannot write their final exam on the date assigned by the Registrar's Office, they need to apply for a deferred exam www.ucalgary.ca/registrar/exams/deferred_final. Under no circumstance will this be accommodated by the Department.

Programmable calculators WILL BE ALLOWED during the writing of tests and the final examination. Cellphones, textbooks, course notes, and other electronic devices WILL NOT BE allowed during the writing of tests and the final examination. Students are reminded that simply being able to access their cellphone during an exam is academic misconduct.

The exact dates for the in-class midterm tests are indicated above.

THERE WILL BE NO MAKEUP OR DEFERRED QUIZZES/TESTS/EXAMS under any circumstances, nor may the quizzes/tests/exams be written early. Students unable to write the quizzes/tests/exams because of documented illness, family emergency, religious observance, or university-sanctioned event will have the weight shifted to the final examination; otherwise a grade of zero will be assigned.

Reappraisal of Grades and Intellectual Honesty:

For reappraisal of graded term work, see Calendar I.2

<http://www.ucalgary.ca/pubs/calendar/current/i-2.html>

For reappraisal of final grade, see Calendar I.3

<http://www.ucalgary.ca/pubs/calendar/current/i-3.html>

Statement of Intellectual Dishonesty, see Calendar K.4

<http://www.ucalgary.ca/pubs/calendar/current/k-4.html>

Plagiarism and Other Academic Misconduct, see Calendar K.5

<http://www.ucalgary.ca/pubs/calendar/current/k-5.html>

Academic Accommodations:

Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services; SAS will process the request and issue letters of accommodation to instructors. Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor. The full policy on Student Accommodations is available at <http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf>.

Freedom of Information and Protection of Privacy (FOIP) Act:

Personal information is collected in accordance with FOIP. Assignments can only be returned to the student and will be accessible only to authorized faculty and staff. For more information, see <http://www.ucalgary.ca/legalservices/files/legalservices/faq-students.pdf> and http://www.ucalgary.ca/legalservices/files/legalservices/faq-faculty_0.pdf.

Internet and Electronic Communication Device information:

The use of cell phones **for any purpose** in class is prohibited. [This includes ordering pizza, cruising Tinder, and posting to Snapchat, etc.] Computers and tablets may be used for note taking only unless otherwise authorized by the instructor.

Copyright Legislation:

See the University of Calgary policy on Acceptable Use of Material Protected by Copyright at www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright.pdf. Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy.

Important Dates:

Please check: <http://www.ucalgary.ca/pubs/calendar/current/academic-schedule.html>

Student Organizations:

Faculty of Arts Students' Association (F.A.S.A.):

Economics Department Representative

Office: SS 803, E-mail: econrep@fasaucalgary.ca and Web: www.fasaucalgary.ca.

Society of Undergraduates in Economics:

<https://www.ucalgarysue.com/>.

Society of Undergraduates in Economics is a student run organization whose main purpose is to assist undergraduate economics students to succeed both academically and socially at the University of Calgary. Services include access to the exam bank, career events such as Industry Night and information sessions, mentorship programs, and social events for members. They invite you to join by contacting SUE at societyofundergradsineconomics@gmail.com.

Faculty of Arts Program Advising and Student Information Resources:

- Have a question, but not sure where to start? The Arts Students' Centre is your information resource for everything in Arts! Drop in at SS102, call them at 403-220-3580, or email them at artsads@ucalgary.ca. You can also visit the Faculty of Arts website at <http://arts.ucalgary.ca/undergraduate>, which has detailed information on common academic concerns, including program planning and advice.
- For registration (add/drop/swap), paying fees and assistance with your Student Centre, contact Enrolment Services at 403-210-ROCK [7625] or visit them in the MacKimmie Library Block.

Student Support and Resources:

- See <https://www.ucalgary.ca/registrar/registration/course-outlines> for information on campus mental health resources, the Student Ombuds' Office, Student Success Centre, Safewalk, and Emergency Evacuation and Assembly.
- Online writing resources are available at <https://ucalgary.ca/student-services/student-success/writing-support>.

NOTES:

- Cell phones **may not be used to for any purpose** in class, including taking photographs.
- Students are responsible for all assigned material, e.g., supplementary material posted on D2L, regardless of whether or not the material was covered in class.

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2019-17-17