

## Economics 527(L01) (World Oil Economics)

Instructor: Lucija Muehlenbachs  
Phone: +1 (403) 220-7264  
Email: [lmuehlen@ucalgary.ca](mailto:lmuehlen@ucalgary.ca)

Lecture Location: SA129  
Lecture Days/Time: MWF 11:00-11:50

Office: SS 410  
Office Hours: Wednesday 14:00-15:00

Winter 2018

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### Course Description:

This course provides an economic overview and analysis of world oil markets. The objective is to apply the tools of economics to improve our understanding of oil markets and policy issues.

### Course Objectives/Learning Outcomes:

Reinforce fundamental economics concepts including scarcity, incentives, opportunity costs, and market failures, among others. Use economic theory to evaluate government interventions in energy markets and to assess policy proposals. Use basic statistical and econometric methods to analyze data and critically evaluate arguments that utilize data. In the OPEC game, students will solve for collusive equilibria in the setting of a non-renewable resource and develop their own strategies given that monitoring oil production is imperfect.

### Course Outline:

The first part of the course will cover oil supply, including topics on oil supply, pricing non-renewable resources, oligopoly and collusion, reserve estimation, transportation and storage, and strategic petroleum reserves. The second part will cover oil demand, including transportation policies and the gasoline industry.

### Prerequisites/corequisites:

Economics 301 and 303

### Required Textbook(s):

There is no required textbook. Required course readings will be made available via D2L. They include articles from the popular press, working papers from government agencies and NGOs, chapters from academic textbooks, and peer-reviewed journal articles. Classes will include discussions based on the readings, so you are required to complete all readings before class.

### Books on Reserve:

David Teece and Griffin, James M., [OPEC behavior and world oil prices](#)

M.A. Adelman, [The genie out of the bottle: world oil since 1970](#)

M.A. Adelman, [The world petroleum market](#)

Nathaniel O. Keohane and Sheila M. Olmstead, [Markets and the Environment](#)

Quentin Grafton, Wiktor Adamowicz, Diane Dupont, Harry Nelson, Robert J. Hill, Steven Renzetti [The Economics of the Environment and Natural Resources](#)

K. Viscusi, J. Harrington, and J. Vernon, [Economics of Regulation and Antitrust](#)

**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 go to your University of Calgary e-mail addresses only.

**Grade Determination and Final Examination Details:**

OPEC GAME	15%
MIDTERM EXAMINATION	20%
FINAL EXAMINATION	30%
EMPIRICAL ASSIGNMENTS	20%
POLICY ANALYSIS	15%
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100%	

**OPEC game**

The OPEC game is a series of simulations of the world oil market developed by Severin Borenstein, at UC Berkeley, and Jim Bushnell, at UC Davis. There will be multiple games running at one time. Each student will be part of a delegation of decision makers from one of 7 OPEC countries. The decisions of the OPEC cartel members take place outside of the US and Europe and the members, are therefore, free to attempt to collude. Grading is based on performance in the game, class participation, and strategy memos. Students will be assigned to teams. The schedule for the OPEC game is:

22-Jan	Mo	Introduction to OPEC game
24-Jan	We	First OPEC meeting in class
26-Jan	Fr	Production quantities due by 10PM for phase 1, period 1
29-Jan	Mo	Production quantities due by 10PM for phase 1, period 2
31-Jan	We	Second OPEC meeting in class
2-Feb	Fr	Production quantities due by 10PM for phase 2, period 1
5-Feb	Mo	Production quantities due by 10PM for phase 2, period 2
7-Feb	We	Production quantities due by 10PM for phase 2, period 3
9-Feb	Fr	Production quantities due by 10PM for phase 2, period 4
12-Feb	Mo	OPEC strategy memo due beginning of class (late submissions not accepted)

**Midterm exam**

The midterm exam will be in class on Friday, February 16.

**Empirical assignments**

There will be two equally weighted assignments involving data analysis. The goal of the assignments is to give you the opportunity to get practice working with data (using a statistical software of your choice, e.g., Stata).

**Policy analysis**

Groups will be tasked with evaluating an assigned policy (e.g., an oil export ban) based on assigned outcomes (e.g., impact on producer surplus or on gasoline prices) from the angle of an assigned interest group (e.g., oil refining industry or oil producer). Groups, policies, outcomes, and interest-group-type will be randomly assigned. Each team will prepare an objectively written economic analysis, comparing and contrasting the effects of a policy on various outcomes. Consulting reports written by individual team members will be attached as appendices to the team's analysis. Teams will jointly give an in-class presentation advocating for a particular policy. Grades will depend on will the quality of your team's

written policy analysis, and the individual reports contained as appendices, and your team's in-class presentation.

### Final

The final exam will be cumulative, and the date will be scheduled by the registrar.

### Grading Scale

A+	95 – 100	B	73 – 76	C-	60 – 62
A	85 – 94	B-	70 – 72	D+	56 – 59
A-	80 – 84	C+	67 – 69	D	50 – 55
B+	77 – 79	C	63 – 66	F	0 – 49

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

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.

Any student work which remains undistributed after the last day of classes will be available to students through the instructor's office during his office hours.

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](http://www.ucalgary.ca/registrar/exams/deferred_final). Under no circumstance will this be accommodated by the Department.

Tests and exams will involve multiple choice questions. Non-programmable calculators will be allowed during the writing of tests or final examinations.

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:**

The student accommodation policy can be found at: [ucalgary.ca/access/accommodations/policy](http://ucalgary.ca/access/accommodations/policy).

Students needing an accommodation because of a disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities [ucalgary.ca/policies/files/policies/student-accommodation-policy](http://ucalgary.ca/policies/files/policies/student-accommodation-policy).

Students needing an Accommodation based on a Protected Ground other than disability should communicate this need, preferably in writing, to the course instructor.

**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](mailto:econrep@fasaucalgary.ca) and Web: [www.fasaucalgary.ca](http://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](mailto: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](mailto: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.
- Online writing resources are available at <http://www.ucalgary.ca/ssc/resources/writing-support>.

**Evacuation Assembly Point:**

In case of an emergency evacuation during class, students must gather at the designated assembly point nearest to the classroom. The assembly point for this classroom is Social Science - Food Court.

**Safewalk:**

The Safewalk program provides volunteers to walk students safely to their destination anywhere on campus. This service is free and available 24 hrs/day, 365 days a year. **Call 403-220-5333.**

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

Personal information is collected in accordance with FOIP. For more information, see <http://www.ucalgary.ca/legalservices/foip/foip-hia>.

**Internet and Electronic Communication Device information:**

The use of cell phones for any purpose in class is prohibited. Computers and tablets may be used for note-taking only.

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