

# Department of Economics Faculty of Arts

# Economics 325 (01) The North American Oil Industry

Instructor: L. Yuan Lecture Location: ICT 116

Phone: 403 220 5863 Lecture Days/Time: MWF 09:00 – 09:50

Email: yuan@ucalgary.ca

Office: SS 416

Office Hours: MW 12:00 – 12:50 or by

appointment Winter 2016

#### **Course Description**

The course introduces students to the crude oil and natural industry in North America, focusing on exploration, development, production and refining. Topics include Canadian and US oil policies, shale revolution, energy mix dynamics, emission and environmental policy, industry taxation, and royalty regimes.

## **Course Objectives/Learning Outcomes**

The main objective of this course is to provide the student with a basis for understanding the structure and economics of the petroleum industry in North America. By the end of the course the students will learn about:

- 1. The role of North American petroleum industry in the world
- 2. General characteristics of the petroleum production process, especially as it is unique to North America
- 3. Economic and policy forces that guide, inform and influence industry decision-making in investment, supply forecasts and pricing
- 4. The nature and responsibility of regulatory oversight in this market

# **Prerequisites/corequisites**

Economics 201 and 203

#### Required Textbook(s)

None

#### Recommended Textbook(s)

*Our Petroleum Challenge, Canadian Resources. Global Markets, 8<sup>th</sup> edition,* (2013) Canadian Centre for Energy Information. (Available on D2L)

Dahl, Carol (2004), *International Energy Markets, Understanding Pricing, Policies and, Profits*, Latest edition, PennWell Publishing.

Additional reading to be available on D2L

#### **Reserved Readings**

Dahl, Carol (2004), *International Energy Markets, Understanding Pricing, Policies and, Profits*, Latest edition, PennWell Publishing.

#### **Course Requirements/Assessments:**

#### Websites

The following institutional websites provide significant amounts of information with respect to the petroleum industry:

Alberta Energy Resources Conservation Board (ERCB) – <a href="www.ercb.ca">www.ercb.ca</a>. Please download the ERCB ST-98 from here: <a href="http://www.ercb.ca/data-and-publications/statistical-reports/st98">http://www.ercb.ca/data-and-publications/statistical-reports/st98</a>

Alberta Department of Energy (ADOE) – www.energy.gov.ab.ca

British Petroleum (BP) - www.bp.com

Canadian Association of Petroleum Producers (CAPP) – www.capp.ca

International Energy Agency (IEA) – www.iea.org

National Energy Board (NEB) - www.neb.gc.ca

Organization of Petroleum Exporting Countries (OPEC) - www.opec.org

US Department of Energy/Energy Information Administration (DOE/EIA) –

www.eia.doe.gov

# **Course Structure and Topics:**

The Course is organized around readings and discussions in the following areas:

- 1. Overview of North American petroleum supply resources and markets
- 2. Understanding of the physical nature of petroleum and derivative products
- 3. The nature of supply and demand in the market
  - a. Crude Oil
  - b. Natural Gas
  - c. Finished Products
- 4. Economic theory and markets
- 5. Supply Cost and investment decisions
- 6. Price setting, market trading and differentials
- 7. Externalities and the Environment
- 8. Petroleum Transportation and Pipeline Restrictions
- 9. Shale Gas / Shale Oil in North America

**Desire2Learn** This course will make use of the Desire2Learn (D2L) platform. Students who are registered in the course can log on at <a href="http://d2l.ucalgary.ca">http://d2l.ucalgary.ca</a> 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**

Quiz 1 10% (February 12, 2016) Quiz 2 10% (March 14, 2016) Quiz 3 10% ((April 4, 2016)

Term paper 25% (Due April 11, 2016; Submit at the beginning of class)

Final Exam 45% (Registrar-scheduled)

Department of Economics Criteria for Letter Grades. Economics professors use the following criteria when assigning letter grades:

Grade	Grade	Description	Grade	Grade	Description
	Point			Point	
	Value			Value	
A+	4.00	Outstanding	C+	2.30	
Α	4.00	Excellent-superior performance, showing-comprehensive understanding of subject matter	С	2.00	Satisfactory – basic understanding of the subject matter
A-	3.70		C-	1.70	Receipt of a grade point average of 1.70 may not be sufficient for promotion or graduation. (See individual undergraduate faculty regulations.)
B+	3.30		D+	1.00	
В	3.00	Good – clearly above average performance with knowledge of subject matter generally complete.	D	1.00	Minimal pass – marginal performance; generally insufficient preparation for subsequent courses in the same subject.
B-	2.70		F	0	Fail – unsatisfactory performance or failure to meet course requirements
			I	0	Incomplete – unsatisfactory (effective January 2007)

# **Grading Scale**

A+	97 - 100	В	75 – 79	C-	60 - 62
Α	90 - 96	B-	70 – 74	D+	55 - 59
A-	85 - 89	C+	67 – 69	D	50 - 54
B+	80 - 84	С	63 – 66	F	< 49

Tests and final exams are marked on a numerical (percentage) basis, then converted to letter grades. The course grade is then calculated using the weights indicated above.

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

Non-programmable calculators will be allowed during the writing of tests or final examinations.

The final examination will be scheduled by the Registrar. It will last two hours and will be held in an assigned room. Examinations and quizzes may contain multiple choice questions.

#### **Reappraisal of Grades**

For reappraisal of graded term work, see Calendar I.2 <a href="http://www.ucalgary.ca/pubs/calendar/current/i-2.html">http://www.ucalgary.ca/pubs/calendar/current/i-2.html</a>

For reappraisal of final grade, see Calendar I.3 http://www.ucalgary.ca/pubs/calendar/current/i-3.html

A student who feels that a piece of graded term work (e.g., term paper, essay, test) has been unfairly graded, may have the work re-graded as follows. The student shall discuss the work with the instructor within 15 days of being notified about the mark or of the item's return to the class; no reappraisal of term work is permitted after the 15 days. If not satisfied, the student shall immediately take the matter to the Head of the department offering the course, who will arrange for a reassessment of the work within the next 15 days. The reappraisal of term work may cause the grade to be raised, lowered, or to remain the same. If the student is not satisfied with the decision and wishes to appeal, the student shall address a letter of appeal to the Dean of the faculty offering the course within 15 days of the unfavourable decision. In the letter, the student must clearly and fully state the decision being appealed, the grounds for appeal, and the remedies being sought, along with any special circumstances that warrant an appeal of the reappraisal. The student should include as much written documentation as possible.

#### **Plagiarism and Other Academic Misconduct**

Intellectual honesty is the cornerstone of the development and acquisition of knowledge and requires that the contribution of others be acknowledged. Consequently, plagiarism or cheating on any assignment is regarded as an extremely serious academic offense. Plagiarism involves submitting or presenting work in a course as if it were the student's own work done expressly for that particular course when, in fact, it is not. Students should examine sections of the University Calendar that present a Statement of Intellectual Honesty and definitions and penalties associated with Plagiarism/Cheating/Other Academic Misconduct, <a href="http://www.ucalgayr.ca/pubs/calendar/current/k.html">http://www.ucalgayr.ca/pubs/calendar/current/k.html</a>

#### **Academic Accommodation**

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. For additional information on support services and accommodations for students with disabilities Visit www.ucalgary.ca/access/.

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 <a href="https://www.ucalgry.ca/policies/files/policies/student-accommodation-policy">www.ucalgry.ca/policies/files/policies/student-accommodation-policy</a> <a href="https://www.ucalgry.ca/policies/files/policies/student-accommodation-policy">www.ucalgry.ca/policies/files/policies/student-accommodation-policy</a> <a href="https://www.ucalgry.ca/policies/files/policies/student-accommodation-policy">www.ucalgry.ca/policies/files/policies/student-accommodation-policy</a> <a href="https://www.ucalgry.ca/policies/files/policies/student-accommodation-policy">www.ucalgry.ca/policies/files/policies/student-accommodation-policy</a> <a href="https://www.ucalgry.ca/policies/files/policies/student-accommodation-policy">www.ucalgry.ca/policies/student-accommodation-policy</a> <a href="https://www.ucalgry.ca/policies/files/policies/student-accommodation-policy">www.ucalgry.ca/policies/student-accommodation-policy</a> <a href="https://www.ucalgry.ca/policies/student-accommodation-policy">www.ucalgry.ca/policies/student-accommodation-policy</a> <a href="https://www.ucalgry.ca/policies/student-accommodation-policy">www.ucalgry.ca/policies/student-accommodation-policy</a> <a href="https://www.ucalgry.ca/policies/student-accommodation-policy">www.ucalgry.ca/policies/student-accommodation-accommodatio

#### Absence from a Quiz/Test/Exam

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. 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 <a href="www.ucalgary.ca/registrar/exams/deferred final">www.ucalgary.ca/registrar/exams/deferred final</a> Under no circumstance will this be accommodated by the department.

#### **Important Dates**

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

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

**Economics Department Representative** 

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

Society of Undergraduates in Economics

www.ucalgarysue.com

Society of Undergraduates in Economics is a student run organization whose main purpose is to assist undergraduate economics students succeed both academically and socially at the University of Calgary. Services include access to the exam bank, career partnerships with the Career Centre through hosting industry nights and information sessions, recognizing achievements in teaching, and organizing social events for members. They invite you to join by contacting <a href="mailto:sue@ucalgary.ca">sue@ucalgary.ca</a>.

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
  <a href="http://arts.ucalgary.ca/undergraduate">http://arts.ucalgary.ca/undergraduate</a> 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 <a href="http://www.ucalqary.ca/ssc/resources/writing-support">http://www.ucalqary.ca/ssc/resources/writing-support</a>

### **Evacuation Assembly Point**

In case of an emergency evacuation during class, students must gather at the designated assembly point nearest to the classroom. The list of assembly points is found at <a href="https://www.ucalgary.ca/emergencyplan/assemblyponts">www.ucalgary.ca/emergencyplan/assemblyponts</a>

Please check this website and note the nearest assembly point for this course

# 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**