



# Department of Economics

## Faculty of Arts

### Economics 427(01) Energy Economics and Policy

Instructor: Douglas McClinton

Lecture Location: MS217

Phone: 403-220-2837

Lecture Days/Time: MWF 12:00 – 12:50 p.m.

Email: [dmclint@ucalgary.ca](mailto:dmclint@ucalgary.ca)

Email2: douglas.mcclinton@shaw.ca

Office: SS348

Office Hours: MW: 3:30 – 4:30  
T: 11:00 – 12:00

Fall: 2017

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#### Course Objectives / Learning Outcomes:

This course covers both a theoretical and empirical analysis of individual and industrial demand for energy, energy supply and public policies affecting energy markets. Students will learn how to apply the tools of economics to the energy industry including crude oil, natural gas, coal, electricity and nuclear power. Specific topics will include global energy supply and demand, price regulation, deregulation and policies concerning climate change. We also look at how the energy markets influence macroeconomic issues such as economic growth, employment, inflation and a society's standard of living.

#### 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.

#### Textbook(s):

There is no required textbook for this course. The course draws heavily on journal articles and some theory explained by Ferdinand Banks in his book titled *Energy and Economic Theory*. This book will be on Reserve in the Taylor Family Digital Library. Students will not be held responsible for the more sophisticated mathematical and statistical material in some of the articles. A recommended reading list will be posted on the course website as we go through the course.

#### Book(s) on Reserve:

Banks, Ferdinand E, *Energy and Economic Theory*, World Scientific Publishing Co., Pte. Ltd. New Jersey, 2015.

**Topics Covered**

1. Introduction and Background.
2. Review of Supply and Demand and Price Formation in Competitive Markets.  
Using the tools of finance for resource economics.
3. Energy Demand: Short run and long run price and income elasticities.
4. Energy Supply and Demand. Economics of Depletable Resources.
5. World Oil and Energy Security.
6. Natural Gas Price Regulation, Electricity and
7. Coal and Nuclear Power.
8. Climate Change and Renewable Energy Policies.

(Note: Information concerning the topics above will be supplemented by my lecture notes and other readings. These readings will be posted on D2L and/or on reserve. The order of the above topics may change as current events and/or the timing of guest speakers may require a shift of the schedule.)

**Other Reference Material**

The US Department of Energy, Energy Information Administration (EIA) is an excellent source of current information on energy economics. You can access this website at [www.eia.doe.gov](http://www.eia.doe.gov).

There are many articles in economic journals that may be of particular interest to you, such as those published in Annual Review of Energy, Journal of Energy and Development, The Energy Journal and the International Journal of Energy Policy – to mention a few. You can also access the Journal of Economic Literature to access up to date articles on energy economics.

Governments also publish useful information on energy issues, such as reports and articles by the National Energy Board, the Science Council of Canada, the Geological Survey of Canada, the Conference Board of Canada and the Department of Natural Resources. In Alberta, information can be found at the Energy and Utilities Board and the Alberta Department of Energy.

**Grade Determination and Final Examination Details:**

5 In-class quizzes (10% each)	40%
(Highest 4 marks will be counted)	
Final Examination (set by the Registrar's Office)	30%

Group Term Paper (5% for a bibliography, 20% for the paper and 5% for participation)	30%
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A passing grade on any particular component of the course is not required for a student to pass the course as a whole.

### In Class Quizzes

There will be 5 in-class quizzes that will take approximately 20 minutes to complete. I will take the highest 4 marks of the five quizzes. The quizzes will consist of short answer questions. There will be NO multiple choice questions. I will announce the date of these quizzes at least one week before the quiz date.

### Term Paper (30% of final mark)

One of the main objectives of this course is to help improve your writing and research skills. The term paper will be a collaborative effort, which will consist of 2 people working on a paper. *The paper will be due Friday December 1st.* I will hand out a list of relevant topics in the first month of classes.

The term paper will be graded in 3 parts. The first part will be worth 5 percent and will be a bibliography exercise that will include a list of academic articles that are relevant to the topic you have chosen. The bibliography will include a short abstract of the papers you have chosen. This bibliography exercise will be due at the end of October. (See the section titled “Important Dates”) The bibliography must be submitted in APA format.

The paper will be worth 20% of your final mark and an additional 5% will be based on group participation. I will hand out a group evaluation form to each member and you will grade each group member on their contribution to the paper. Any “free riders” will receive a zero on this participation mark.

### Examinations:

1. Examinations will consist of problem solving questions.
- 2 The final examination will last for two hours and will be scheduled by the Registrar. **The exam must be completed during the specified time. Extra time will not be given for any reason.**
3. The use of a calculator is permitted during the quizzes and the final examination. **The use of tablets, computers, cell phones, blackberry's and other electronic devices (unless approved by your instructor) is not permitted.**

### **Grade Determination and Final Examination Details**

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

Grade	Grade Point Value	Description	Grade	Grade Point Value	Description
A+	4.00	Outstanding	C+	2.30	
A	4.00	Excellent-superior performance, showing-comprehensive understanding of subject matter	C	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	
B	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)

Assignments, tests and final exams are marked on a numerical (percentage) basis. The marks are then added using the weights indicated above and converted into letter grades. As a guide to determining standing, these letter grade equivalences will generally apply:

A+	95 – 100	B	75 - 79	C-	60 - 62
A	90 – 94	B-	70 - 74	D+	56 - 59
A-	85 – 89	C+	67 - 69	D	50 – 55
B+	80 - 84	C	63 - 66	F	0 – 49

The course grade is then calculated using the weights indicated above. The cut-off between letter grades will be at the midpoint between the numerical grades. Part marks of 0.5 or above will be rounded up; below 0.5 will be rounded down. For example, a grade of 79.5 will receive a B+ where a grade of 79.4 will receive a B.

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

There will be a Registrar scheduled final examination, held in a classroom, lasting 2 hours.

Tests and exams WILL NOT involve multiple choice questions.

**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 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/](http://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 <http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf>

**Absence from a Quiz/Test/Exam**

THERE WILL BE NO MAKEUP OR DEFERRED MIDTERM EXAMS under any circumstances, nor can the midterm exams be written early. Students unable to write 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 at [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.

**Additional Notes:**

1. Late assignments, bibliographies and/or term papers will be deducted 10% for each business day that the assignment/paper is late.
2. Examinations will not be given prior to the scheduled date.
3. Students should be aware of the academic regulations outlined in The University of Calgary Calendar.
4. Students will be responsible for all material listed on the course outline, regardless of whether or not the material has been covered in class, unless the instructor notifies the class that the material will not be covered.
5. Please note that the following types of emails will receive no response: emails not addressed to anyone in particular; emails where the recipient's name is not spelled correctly; anonymous emails; emails which do not specify the course and section in which you are registered; and, emails involving questions that are specifically addressed on the course outline.

6. I check my emails twice per day, once in the morning and once in the afternoon. (Excluding weekends) Since I teach hundreds of students, please send me an email only if it is absolutely necessary and/or in the case of an emergency.

### **Important Dates**

Date	
Mon. Sept. 11	Lecture begins.
Mon. Oct. 9	Thanksgiving – no classes.
Fri. Oct. 27	<b>Due date for Bibliography.</b>
Mon Nov. 13	No classes due to Remembrance Day.
Friday Dec 1	<b>Due date for Term Paper.</b>
Friday Dec 8	Fall Term Lectures End. Last day to withdraw with permission from Fall Term half courses.
Dec 11 – 22 <sup>nd</sup>	Fall Term Exam Period.

### **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 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 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.**