

# Department of Economics Course Outline

Term: Fall 2013

Course: Economics 329 Section: 01

[Electricity Markets]

**Time:** TR 17:00 – 18:15 **Place:** EDC 388

**Instructor:** Matt Ayres

**Office:** SS 408\* **Telephone:** 403 220 7893\*

Office By appointment\* E-mail: mayres@ucalgary.ca

**Hours:** 

## **Textbook(s):**

None required but one of the following recommended. Most books on electricity economics are quite advanced, these books are no exception, but they do provide a lot of additional and useful information. Lectures will provide references to relevant readings in both books. Harris is available in University bookshop there's also an ebook version available which is considerably cheaper see the Blackboard forums for details and further notes on the text books.

Harris, Chris (2006), *Electricity markets: Pricing Structures and Economics*. Stoft, Steven (2002), *Power System Economics*.

## **Book(s) on Reserve:**

TBC

### **Course Outline:**

Electricity has some unique characteristics that pose unique economic problems. Some jurisdictions have sought to use markets (deregulation) to tackle these problems rather than central planning (regulation), other jurisdictions have not. Even within market based systems there are important differences in structure and market rules. Not all of the drivers are economic, some are technical, some historical and some political. The interplay between all of these factors makes for complex, controversial and, often, poorly understood.

To make the course as accessible as possible the focus will be on using the Alberta Electricity Market as a case study, comparing and contrasting this to the approaches used elsewhere. Where possible we will avoid the textbook in preference for primary sources (industry and government publications and studies).

The course will begin with a basic introduction to electricity, history of markets and regulation and quickly turn to look at the key questions:

<sup>\*</sup>See notes under *About the Instructor* below

- Do markets result in the best prices for production and consumption
- Do markets get the best level of investment?

In doing so we'll examine economic efficiency, fixed and marginal costs and how market power can influence market outcomes. Having answered those questions the course will provide a brief introduction to other areas of electricity economics:

- Can markets be reliable (enough)?
- Can markets plan transmission?
- Can markets deal with congestion?
- Can markets deal with environmental concerns?
- Are there special issues with retail electricity markets?

## **About the instructor:**

Matt is a sessional lecturer at the university, who works full time as Chief Economist at the Alberta Market Surveillance Administrator (an agency that monitors the Alberta electricity market for breaches in rules and anti-competitive behavior). The above outline notes (\*) office and phone numbers, unless previously arranged, email (mayres@ucalgary.ca) should be used instead. Please do <u>not</u> use alternate contact numbers / email. Students are encouraged to ask questions during (or at the end) of class and make use of the forums on Blackboard.

## Blackboard:

This course will make use of Blackboard - students who are registered in the course can log on at <a href="http://blackboard.ucalgary.ca/webapps/login">http://blackboard.ucalgary.ca/webapps/login</a>. Please note that Blackboard features a class e-mail list that I will use. It is your responsibility to ensure that Blackboard uses the e-mail address of your choice; and that the e-mail address recorded by the Registrar is correct. (You can check your address on MyUofC.) **Please check Blackboard regularly**, course materials and readings will be added throughout the course. An FAQ will be added if it becomes necessary.

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

Assignment (late Sep/	20%
early Oct)	
Midterm Exam (Nov)	30%
Final Examination	50%

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

A+	95 - 100	В	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

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

There will be a Registrar scheduled final examination, lasting **two** hours.

Students who are unable to write the in class quiz because of an illness, family emergency or religious observance will have the midterm weight shifted to the final examination. Documentation MUST be provided.

It is the student's responsibility to request academic accommodations. If you are a student with a documented disability who may require academic accommodation and have not registered with the Disability Resource Centre, please contact their office at 403-220-8237. Students who have not registered with the Disability Resource Centre are not eligible for formal academic accommodation. You are also required to discuss your needs with your instructor no later than fourteen (14) days after the start of this course.

Students seeking reappraisal of a piece of graded term work should discuss their work with the instructor *within fifteen days* of work being returned to class.

## Other Information:

Students' Union Vice-President Academic:

Emily Macphail Phone: 403-220-3911

E-mail <a href="mailto:suvpaca@ucalgary.ca">suvpaca@ucalgary.ca</a>

Students' Union Faculty Representative (Arts)

Phone: 403-220-3913Office: MSC 251

E-mail arts1@su.ucalgary.ca arts2@su.ucalgary.ca, arts3@su.ucalgary.ca, arts4@su.ucalgary.ca

Society of Undergraduates in Economics (S.U.E.):

www.ucalgary.ca/sue

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 sue@ucalgary.ca.

Faculty of Arts Program Advising and Student Information Resources

- Have a question, but not sure where to start? The Faculty of Arts Program Information Centre (PIC) is your information resource for everything in Arts! Drop in at SS102, call them at 403-220-3580 or email them at <a href="mailto:artsads@ucalgary.ca">artsads@ucalgary.ca</a>. You can also visit the Faculty of Arts website at <a href="mailto:http://arts.ucalgary.ca/undergraduate">http://arts.ucalgary.ca/undergraduate</a> which has detailed information on common academic concerns.
- For program planning and advice, contact the Student Success Centre (formerly the Undergraduate programs Office) at 403-220-5881 or visit them on the 3<sup>rd</sup> Floor of the Taylor Family Digital Library.

- 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://ucalgary.ca/ssc/writing-support/online-writing-resources">http://ucalgary.ca/ssc/writing-support/online-writing-resources</a>

Safewalk / Campus Security: 403-220-5333 Emergency Assembly Point: Scurfield Hall Atrium

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MA/mi 2013-09-03