

Department of Economics Course Outline

Term: Fall 2014

Course: Econ 329 Section: 01

[Electricity Markets]

Time: MW 17:00 – 18:15 **Place:** SH 268

Instructor: Matt Ayres

Office: SS 447* **Telephone:** 403 220 6550*

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

Hours:

Textbook(s):

None required. For those wanting to have a relevant text book I would recommend either of the books listed below. Most books on electricity economics are quite advanced, these books are no exception. Harris is also available in an ebook version.

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

Book(s) on Reserve:

Harris, Chris (2006), *Electricity markets: Pricing Structures and Economics* Stoft, Steven (2002), *Power System Economics* Hunt, Sally (2002), *Making competition work in electricity* Sweeney, James (2002), *The California electricity crisis*

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:

^{*}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 an Adjunct Assistant Professor 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 Desire2Learn.

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 using or through their student centre. Please note that D2L features a class e-mail list that may be used to distribute course-related information. It is your responsibility to ensure that D2L uses the e-mail address of your choice. **Please check the site 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 (Monday, October 6, 2014)				
Midterm Exam (Wednesday, November 5, 2014)	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 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 mid-term 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:

Hana Kadri

Phone: 403-220-3911

E-mail suvpaca@ucalgary.ca

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 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.
- For program planning and advice, contact the Student Success Centre (formerly the Undergraduate programs Office) at 403-220-5881 or visit them on the 3rd 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 http://ucalgary.ca/ssc/writing-support/online-writing-resources

Safewalk / Campus Security: 403-220-5333 Emergency Assembly Point: Education Block Food Court *****

MA/mi 2014-04-25