

Department of Economics Course Outline

Term: Fall 2011

Course: Economics 557 **Section:** 01

[Topics in Economic Theory I]

Time: TR 09:30 – 10:45 **Place:** ST 125

Instructor: Dr. Kenneth J. McKenzie

Office: McKenzie SS 452 Telephone: McKenzie 220-4605

Office TR 11:00-12:00 E-mail: kjmckenz@ucalgary.ca

Hours: and by appointment

Textbook(s):

Gravelle, H. and R. Rees (2004), *Microeconomics*, 3rd ed., Pearson Education.

Gibbons, R. (1992), Game Theory for Applied Economists, Princeton University Press.

Reserved Readings: n/a

Course Description:

The purpose of this course is to re-introduce you to the weird and wonderful world of microeconomic theory. While many of the topics covered in the course will be familiar to you from earlier courses, we will cover them in a more rigorous manner. The course is fairly standard - neoclassical consumer and producer theory, partial and general equilibrium analysis, decision making under uncertainty, and an introduction to game theory. You are expected to be familiar with basic differential and integral calculus, most particularly constrained optimization.

A preliminary reading list is attached.

Finally, if you find the course difficult, remember the immortal exchange between Alice and the Queen of Hearts:

"I can't believe that!", said Alice.

"Can't you?", the Queen said in a pitying tone. "Try again: draw your breath and shut your eyes."

Alice laughed. "There's no use trying," she said, "one can't believe impossible things."

"I dare say you haven't had much practice," said the Queen.

Course Topics and Readings:

The course can be roughly divided into three parts: consumer and producer theory, and partial equilibrium analysis; general equilibrium analysis and welfare economics; and game theory.

We will move rather quickly through consumer theory, producer theory and the partial equilibrium analysis of perfectly competitive markets. This section of the course should take about 12 classes. My reasoning for moving quickly through this part of the course quickly is that you will have seen much of the material in some form before; I can therefore rely on you to go over the material that we do not cover in-depth in class on your own.

The next section of the course will deal with general equilibrium and welfare analysis. This section of the course should take about 4 classes.

The final section of the course will be devoted to an introduction to, and applications of, game theory. Various types of market failures, such as market power, public goods, externalities, and asymmetric information will be discussed in a game theoretic framework. This part of the course will rely somewhat more on applications than the rest of the course. This section of the course should take about 10 classes.

1. Consumer Theory

Gravelle and Rees 2-4

2. Choice Under Uncertainty

Gravelle and Rees 17, 19

3. Producer Theory

Gravelle and Rees 5-7

4. Partial Equilibrium Competitive Markets

Gravelle and Rees 8

5. General Equilibrium in Competitive Markets and Welfare Economics

Gravelle and Rees 12, 13

6. Introduction to Game Theory I: Static Games of Complete Information

Gravelle and Rees 15, 16

Gibbons 1

Applications: Cournot and Bertrand Oligopoly, Public Goods, Externalities

7. Introduction to Game Theory II: Dynamic Games of Complete Information

Gravelle and Rees 15, 16

Gibbons 2

Applications: Stackelberg Oligopoly, Bargaining, Tarriffs and Imperfect International

Competition, Repeated Games, Cournot Collusion, Efficiency Wages

8. Introduction to Game Theory III: Games of Incomplete Information

Gravelle and Rees 15, 16

Gibbons 3, 4.1, 4.2

Applications: Auctions, Job-Market Signalling, Corporate Investment and Capital Structure

Grade Determination:

1. 5 Mini Assignments	10%
2. 2 Major Assignments	20%
3. Mid-term Exam – Thursday, November 3	20%
4. Final Exam (scheduled by Registrar)	50%

The official grading system will be used. A letter grade will be awarded based on the numeric average of the exams and assignments.

Notes:

- 1. Students must receive a passing grade on the final exam in order to pass the course. The final exam will be comprehensive.
- 2. Any work not submitted on time will receive a grade of zero. Extensions and exemptions for assignments and exams will not be given. In the case of documented illness, family or personal emergency, or religious observance extra weight will be placed on the final exam.
- 3. Students seeking reappraisal of term work should discuss the issue with the instructor within fifteen (15) days of the work being returned in class.
- 4. 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 are not registered with the Disability Resource Centre are not eligible for formal academic accommodation. You are also required to discuss your needs with the instructor no later than fourteen (14) days after the start of the course.

Students' Union Vice-President, Academic

Ola Mohajer

Phone: 403-220-3911

E-mail: suvpaca@ucalgary.ca

Students' Union Faculty Representative (Arts)

Phone: 403-220-3913 Office MSC 251

E-mail arts 1@su.ucalgary.ca

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

E-mail: <u>sue@ucalgary.ca</u> 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. Join now by contacting sue@ucalgary.ca.

Faculty of Arts Program Advising and Student Information Resources

- Have a question, but not sure where to start? The new Faculty of Arts Program
 Information Centre (PIC) is your information resource for everything in Arts! Drop in at
 SS110, call us at 403-220-3580 or email us 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 in their new space 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 at the MacKimmie Library Block.

Safewalk/Campus Security: 220-5333 Emergency Assembly Point: ICT Food Court

KJM: 2011-08-09