Economics 757(L01) Advanced Microeconomic Theory

Instructor: Joanne Roberts
Phone: 220-6796
Email: joanne.roberts@ucalgary.ca

Lecture Location: SS403
Lecture Days/Time: TR 9:30-10:45

Office: SS 448
Office Hours: TR 11-12
Winter 2016

Course Description:
Building on Economics 707, a comprehensive treatment of game theory, the economics of uncertainty and information, and the theory of incentives will be introduced. Other topics may be included as time and interest allow.

Over the course of the term, we will cover the following topics:

1. Game Theory
   - Nash Equilibrium, Games of Perfect Information (Mas-Collel et al, Chapters 7, 8, 9, Osborne et al Chapters 2, 3, 4,6)
   - Bargaining, Repeated Games (Osborne et al Chapters 7, 8)
   - Games of Imperfect Information (Osborne et al Chapters 11, 12)

2. Information Economics
   - Adverse Selection, Signaling and Screening (Mas-Collel et al, Chapter 13)
   - Principal Agent problem (Mas-Collel et al, Chapter 14)

3. Welfare and Social choice theory
   - Social Choice Theory (Mas-Collel et al, Chapter 21)
   - Welfare Economics and Axiomatic Bargaining (Mas-Collel et al, Chapter 22, Osborne et al Chapter 10)
   - Incentives and Mechanism Design (Mas-Collel et al, Chapter 23, Osborne et al, Chapter 10)

Objective/Learning Outcomes:
Students will become comfortable with the analysis of strategic situations.

Prerequisites/corequisites
Economics 707 or permission of the GPD.

Required Textbook(s):
Osborne and Rubinstein (1994) A Course in Game Theory, MIT Press (available online from authors’ websites)
Recommended Textbook(s):
Jehle & Reny. Advanced Microeconomic Theory, Addison Wesley
Osborne. An Introduction to Game Theory, Oxford.

Course Requirements/Assessments:
Grades will be based on three problem sets (12%), two midterm exams (20% each), a presentation on a theory or applied theory paper of their choice given in the last few weeks of class (18%), and a final exam (30%). I encourage you to work together on assignments, but each person must turn in their own assignment. I strongly recommend that you take the time to work through and understand the problem sets. Exams will be of a similar nature. Late work will not be accepted. Details will be given in class.

Midterm dates: February 11, March 17
Problem set due dates: January 28, March 3, March 31

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.

Grade Determination and Final Examination Details:
Department of Economics Criteria for Letter Grades. Economics professors use the following criteria when assigning letter grades:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Point Value</th>
<th>Description</th>
<th>Grade</th>
<th>Grade Point Value</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>A+</td>
<td>4.00</td>
<td>Outstanding</td>
<td>C+</td>
<td>2.30</td>
<td>All grades below “B-“ are indicative of failure at the graduate level and cannot be counted toward Faculty of Graduate Studies course requirements. Individual programs may require a higher passing grade.</td>
</tr>
<tr>
<td>A</td>
<td>4.00</td>
<td>Excellent-superior performance, showing-comprehensive understanding of subject matter</td>
<td>C</td>
<td>2.00</td>
<td>the subject matter</td>
</tr>
<tr>
<td>A-</td>
<td>3.70</td>
<td>Very good performance</td>
<td>C-</td>
<td>1.70</td>
<td></td>
</tr>
<tr>
<td>B+</td>
<td>3.30</td>
<td>Good performance</td>
<td>D+</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
<td>Satisfactory performance</td>
<td>D</td>
<td>1.00</td>
<td></td>
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<tr>
<td>B-</td>
<td>2.70</td>
<td>Minimum pass for students in the Faculty of Graduate Studies</td>
<td>F</td>
<td>0</td>
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Grading Scale

<table>
<thead>
<tr>
<th>Letter</th>
<th>Minimum</th>
<th>Maximum</th>
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<tbody>
<tr>
<td>A+</td>
<td>95 – 100</td>
<td></td>
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<tr>
<td>A</td>
<td>85 – 94</td>
<td></td>
</tr>
<tr>
<td>A-</td>
<td>80 – 84</td>
<td></td>
</tr>
<tr>
<td>B+</td>
<td>77 – 79</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>73 – 76</td>
<td></td>
</tr>
<tr>
<td>B-</td>
<td>70 – 72</td>
<td></td>
</tr>
<tr>
<td>C+</td>
<td>67 – 69</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>63 – 66</td>
<td></td>
</tr>
<tr>
<td>C-</td>
<td>60 – 62</td>
<td></td>
</tr>
<tr>
<td>D+</td>
<td>56 – 59</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>50 – 55</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>0 – 49</td>
<td></td>
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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.

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

Tests and exams WILL NOT involve multiple choice questions.

Reappraisal of Grades

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

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,
http://www.ucalgayr.ca/pubs/calendar/current/k.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/.

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 www.ucalgry.ca/policies/files/policies/student-accommodation-policy_0.pdf

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 14 days after the start of this course.

**Absence from a Test/Exam**

THERE WILL BE NO MAKEUP OR DEFERRED QUIZZES under any circumstances, nor may the quizzes be written early. Students unable to write the quizzes 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 www.ucalgary.ca/registrar/exams/deferred_final Under no circumstance will this be accommodated by the department.

**Important Dates**

Please check: http://www.ucalgary.ca/pubs/calendar/current/academic-schedule.html

Faculty of Grad Studies website: http://grad.ucalgary.ca/home

Graduate Students Association: http://gsa.ucalgary.ca/

Professional Development for Grad Students
Workshops and resources can be found at http://www.ucalgary.ca/mygradskills/

Economics Graduate Association: http://econ.ucalgary.ca/ega/

**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 www.ucalgary.ca/emergencyplan/assemblypoints
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