### **UNIVERSITY OF WATERLOO**

### **Department of Economics**

#### **Economics 201 (001) – Microeconomic Theory 1**

Fall 2011 Lecture: Tuesday and Thursday 2:30-3:50, PAS 2083

Instructor: Ryan George Phone: 519-888-4567 ext. 33169 Email: r22georg@uwaterloo.ca Office: Hagey Hall, room 218 Office Hours: Wednesday 12:30-2pm

#### **Course Description:**

This course covers foundational theoretical material in microeconomics. We will begin with models of consumer and producer behaviour based on principles of optimization and construct a theory of competitive markets. We will then examine theories of market influence using modifications of perfect competition and game theoretic approaches.

#### **Course Objectives:**

Through lectures, reading and practice in solving problems the course aims to:

- 1. Encourage an appreciation for the process of model-building in microeconomics.
- 2. Develop a capacity to reason about economic questions.
- 3. Gain familiarity with graphical, algebraic and verbal means of analyzing models.

#### **Evaluation:**

Midterm Examination 1 (October 11)	25%
Midterm Examination 2 (November 15)	25%
Final Examination (Exam Period)	50%

**Midterm Exams:** There will be two midterm exams worth 25% each of the final grade in class on October 11<sup>th</sup> and November 15th They will test students' acquisition and dexterity with the material in the lectures and problem sets.

**Final Exam:** The comprehensive final exam will be scheduled during the formal exam period. It will count for 50% of the final grade.

**Problem Sets:** Three sets of practice questions will be posted along with solutions on UW-ACE course-page. These problems offer students a chance to assimilate the material and practice solving exam-type problems, and **are not a component of students'** 

**evaluation.** Students may gain additional facility with the material by doing problems from the textbook and optional 'workouts' exercise books.

**Missed work with valid reasons:** If a student is unable to take a midterm exam for documented reasons her/his mark will be calculated by transferring the weight of the missed exam to the final exam.

**Required Textbook:** Varian, H. R., 2006, *Intermediate Microeconomics: A Modern Approach*, 8th Ed. (Earlier editions are acceptable, though it is the student's responsibility to ensure that they are familiar with material added to the 8<sup>th</sup> edition, viz. Chapter 29 Game applications).

**Communicating with the instructor.** The instructor will rely upon UW-ACE to make announcements, and post problem sets and their solutions. Please use email for administrative concerns. I will be available during office hours to discuss course material, or by appointment in cases where students cannot attend them.

### **Cross-listed course:**

Please note that a cross-listed course will count in all respective averages no matter under which rubric it has been taken. For example, a PHIL/PSCI cross-list will count in a Philosophy major average, even if the course was taken under the Political Science rubric. Please note that a cross-listed course will count in all respective averages no matter under which rubric it has been taken. For example, a PHIL/PSCI cross-list will count in a Philosophy major average, even if the course was taken under the Political Science rubric. If a Philosophy major average, even if the course was taken under the Political Science count in a Philosophy major average, even if the course was taken under the Political Science rubric.

## Academic Integrity:

Academic Integrity: In order to maintain a culture of academic integrity, members of the University of Waterloo are expected to promote honesty, trust, fairness, respect and responsibility.

**Discipline:** A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 - Student Discipline,

## http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm

**Grievance:** A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70 - Student Petitions and Grievances, Section 4, http://www.adm.uwaterloo.ca/infosec/Policies/policy70.htm

**Appeals:** A student may appeal the finding and/or penalty in a decision made under Policy 70 - Student Petitions and Grievances (other than regarding a petition) or Policy 71 - Student Discipline if a ground for an appeal can be established. Read Policy 72 -

Student Appeals, http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm Academic Integrity website (Arts): http://arts.uwaterloo.ca/arts/ugrad/academic\_responsibility.html Academic Integrity Office (UW): http://uwaterloo.ca/academicintegrity/

## Accommodation for Students with Disabilities:

**Note for students with disabilities:** The Office for Persons with Disabilities (OPD), located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the OPD at the beginning of each academic term.

Date	Lecture Topic	Textbook Chapter	Problem Set	
Week One				
September 13	Introduction to	1. The Market		
	Course			
September 15	Optimal Consumer	2. Budget Constraint,		
	Choice I:	5.1		
	Introduction, Budget			
	Constraint			
	Week	Two		
September 20 and	Optimal Consumer	3. Preferences and 4.	PS 1 posted	
22	Choice II: Utility,	Utility	with solutions	
	Preferences and			
	Choice			
	Week	Three		
September 27	Demand and Slutsky	6. Demand, 8. Slutsky		
		Equation		
September 29	Consumer's Surplus	14. Consumer's		
		Surplus		
	Week	Four		
October 4	Market Demand	15. Market Demand		
October 6	Review of Demand			
	Theory			
	Week	Five		
October 11	MIDTERM EXAM I			
October 13	Equilibrium	16. Equilibrium		
Week Six				
October 18	Exchange	31. Exchange		
October 20	Optimal Producer	18. Technology		
	Choice I: Technology	20. Cost Minimization		
	and Cost			

# **Course Schedule:**

Week S	Seven	
Optimal Producer		PS 2 posted
Choice I contd.		with solutions
Optimal Producer	19. Profit	
Choice II: Profit	Maximization	
Maximization		
Week I	Eight	
Supply – Firm and	22. Firm Supply	
Industry	23. Industry Supply	
Monopoly	24. Monopoly	
Week	Nine	
Oligopoly	27. Oligopoly	
Review of Supply		
Theory and Market		
Equilibrium		
Week	Ten	
MIDTERM EXAM II		
Strategic Interaction I	28. Game Theory	
Week E	lleven	
Strategic Interaction	29. Game Applications	PS 3 posted
II		with solutions
Strategic Interaction		
III		
Week T	welve	
Review of Theories		
of Market Power and		
Interaction		
Course Summary		
	Optimal Producer   Choice I contd.   Optimal Producer   Choice II: Profit   Maximization   Week I   Supply – Firm and   Industry   Monopoly   Week I   Oligopoly   Review of Supply   Theory and Market   Equilibrium   Week   MIDTERM EXAM II   Strategic Interaction I   II   Strategic Interaction   II   Week E   Strategic Interaction   III   Week T   Review of Theories   of Market Power and   Interaction	Choice I contd.9. ProfitOptimal Producer Choice II: Profit Maximization19. Profit MaximizationMaximization19. Profit MaximizationWeek Eight10. Supply – Firm and Industry22. Firm Supply 23. Industry SupplyMonopoly24. MonopolyMonopoly24. MonopolyVeek Nine10. Supply 27. OligopolyOligopoly27. OligopolyReview of Supply Theory and Market Equilibrium28. Game TheoryMIDTERM EXAM II Strategic Interaction I II28. Game ApplicationsStrategic Interaction II29. Game ApplicationsStrategic Interaction II29. Game ApplicationsMino29. Game ApplicationsMino10. Strategic InteractionMino10. Strategic InteractionII11. Strategic Interaction