

Economics 800**Microeconomic Theory**

Instructor: Jingang Zhao, 810 Arts (966-5217, [j.zhao@usask.ca](mailto:j.zhao@usask.ca))  
Office hours: TWR 4:00 – 5:00 PM

T.A.: TBA  
T.A. Office hours: TBA

Lectures: TR 2:30-3:50 PM, Arts 106

Website: <http://homepage.usask.ca/~jiz400/course/800/800.html>

Objectives: This course covers the fundamental parts of microeconomic theory by focusing on individual decision making and price determination. The first half reviews optimization tools, and covers demand theory and related topics. The second half covers supply theory, partial equilibrium pricing, general equilibrium pricing, rational choices under uncertainty, and other selected topics.

Grades: 10 % assignments  
40 % midterm exam (October 18)  
50 % final exam (date to be arranged)

Students are advised to finish reading assignments by the deadline and to take notes carefully during lecture, and are encouraged to discuss assignment in a study group, but a student must work details out oneself and acknowledge all help received (such as help from fellow students, tutors and old answer keys). Late assignments will not be accepted. Make-up exams will be given only if there are legitimate excuses (such as Doctor's note).

Required Text: H. Varian, *Microeconomic Analysis*, 3rd edition, Norton, 1992.

Optional Texts: Mas-Colell, Whinston & Green, *Microeconomic Theory*, Oxford U., 1995.  
Simon & Blume, *Mathematics for Economists*, Norton, 1994

Outline: Detailed outline and reading lists are on the next two pages.

## Econ 800 Outline and Readings

(updated on 8/28/2011)

(Topics may change, depending on the interests of those attending. V refers to Varian, M refers to Mas-Colell, Whinston & Green.)

<u>Dates</u>	<u>Topic(s)</u>	<u>Readings</u>
<b><u>Part 1. Review of Optimization Tools</u></b>		
9/6	Nature of microeconomics, First and second order conditions, Envelope theorems I & II	V26, 27.1-4
9/8,13,15	Convex analysis, Envelope theorem III, Optimization modeling and geometric solutions	V27.3-7; M, p926-970
<b><u>Part 2. Classical Demand Theory</u></b>		
9/ 20, 22	Axioms on preferences Properties of utility function Utility maximization	V7; M2
9/27	Marshallian demand and its properties	V7; M, p40-56
9/29, 10/4	Duality in demand: Hicksian demand, Roy's identity Slutsky equation, integrability	V8; M, p56-75
<b><u>Part 3. Topics in Consumer Theory</u></b>		
10/6	Revealed preferences, Weak and strong axioms	V8; m, p28-36, 91-92
10/11,13	Consumer's welfare evaluation: Money metric utility, equivalent variation Compensating variation, consumer surplus	V10; m, p80-91
<b>10/18</b>	<b>Midterm</b>	

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<u>Dates</u>	<u>Topic(s)</u>	<u>Readings</u>
	<b><u>Part 4. Theory of the Firm</u></b>	
	Profit maximization	
10/20, 25	Profit function	V2,3; M5
	Hotelling's lemma	
	Technology set	
10/27	Properties of production function	V1; M5
	Returns to scale and homogeneity	
	Cost minimization	
11/1, 3	Properties of cost function	V4-6; M5;
	Shephard's lemma	V6, M, p63-67
	Duality	
	<b><u>Part 5. Market Equilibrium</u></b>	
	Competitive market	
11/8, 10,15	Monopoly	V13,M10;
	Oligopoly, Introduction to game theory	V14, 16; M, p383-387
	General equilibrium analysis:	
11/17, 22	Existence	V17,
	First and second welfare theorems	M15-16.b-C
	<b><u>Part 6. Special Topics</u></b>	
11/24, 29	Elements of choice under uncertainty	V 11, M6
12/1	Review	
12/??	<b>Final</b> (date to be arranged)	