Fall 2009

Prof. J. Kohlhase
University of Houston

ECON 6342 – Section 17546
MICROECONOMIC THEORY I

Version current as of 8/24/09 (replaces 8/6/09 version)

Office: 201B McElhinney (M)
hours: 4:30-5:30pm MW or by appointment 713-743-3799
email: jkohlhase@uh.edu
web pages: http://www.uh.edu/~kohlhase (general information)
http://www.uh.edu/webct (class website, use Blackboard Vista; password access)

TA: Senay Topal, 203A McElhinney, office hours by appointment, office phone: 713-743-3844, email senaytopal@yahoo.com.

Overview: This course is the first in a sequence of two advanced microeconomic theory courses offered in the graduate economics curriculum at the University of Houston. The course will cover the modern microeconomic theory of economic choices made by individual consumers and firms. We will also examine non-strategic markets such competitive markets and monopoly. Topics we will cover include special classes of preferences and production functions, choice under uncertainty, and individual measures of welfare. The course also introduces you to some mathematical methods used in microeconomic theory such as optimization, constrained optimization (including the Kuhn-Tucker Theorem), the envelope theorem, and comparative statics. The second micro course (Econ 7342) will develop models of strategic behavior and interactions among agents and groups of agents.

Logistics: Class time consists of two parts, lectures and labs. The lectures are held MW 1-2:30pm in room 120M and taught by me. The lab is held on Fridays from 3-4:30pm in the economics conference room, room 212M, and taught by the teaching assistant (TA). Typically the (TA) will go over homework in the Friday labs, and students may be asked to present solutions too. Occasionally I may use the period for lectures, as needed. I expect you to attend all lectures and labs and to be an active participant in each. Homework and other course materials will be posted on our class Blackboard Vista website.

Required Textbooks:

(JR) G.A. Jehle and P.J. Reny***, Advanced Microeconomic Theory***, 2nd edition, Addison-Wesley, 2001, ISBN-10: 0321079167.

(MWG) A. Mas-Colell, M.D. Whinston and J.R. Green***, Microeconomic Theory,*** Oxford University Press, 1995, ISBN-10: 019507340.

Other Useful Textbooks:

Micro Theory:

(V) H. Varian, ***Microeconomic Analysis***, 3rd. ed., Norton, 1992. A shorter version of Mas-Colell.

W. Nicholson and C. Snyder, ***Microeconomic Theory: Basic Principles with Extensions,*** 10th ed., Southwestern, 2007. Micro theory at the "masters-level." Easier than MWG,

a good transition book between undergrad intermediate and graduate advanced courses. Earlier editions (with only Nicholson as the author) are also fine. This book is harder than Nicholson's undergrad intermediate text, *Intermediate Microeconomics.*

Math related:

K. Sydsaeter, A. Strom and P**.** Berck, ***Economists Mathematical Manual***, 4th ed**.** Springer, 2005. A short book defining most of the mathematical notation you will encounter in micro theory. (Recommended)

(SS) E. Silberberg and W. Suen, ***The Structure of Economics: a Mathematical Analysis***, 3rd. ed., Irwin McGraw-Hill, 2001. Very good on constrained optimization and comparative statics.

A. C. Chiang, ***Fundamental Methods of Mathematical Economics***, 3rd ed., McGraw-Hill, 1984 (or any edition). The classic math-econ book written at a lower level than Silberberg and Suen.

Course Evaluation: 30% Midterm (Monday October 12, 2009 in class)
50% Final Exam (Wednesday December 2, 2009 in class, 3 hours)
20% Homework sets

The exams will consist of problems and will be closed-book, closed-note and given in-class. About ten homework sets will be assigned during the semester and each will be assigned a specific due date. Completing the homework is an important part of the course, and will help you better understand the course material.

Course Policies: All exams and homeworks are mandatory. Unapproved absence from any exam counts as a zero. No late assignments accepted. Any late homework receives a score of zero. Original hard copies (but no xeroxes) of homeworks are required; no electronic submissions will be accepted. You may form homework study-groups (in fact I encourage you to do so), but each student must turn in her/his own homework sets. Each homework set turned in must be unique and original. You are expected to do your own work on the exams. No makeup exams. Any absence from an exam for medical reasons must be documented by your physician. Any other absence from an exam must be approved by me *in advance* in writing. **All exams and homeworks are covered by the Honesty code of the University of Houston** (see Student Handbook available at http://www.uh.edu/dos/publications/handbook.php).

Course Preparation: Students should have a working knowledge of multivariate calculus, matrix algebra, formal logic and probability; also be competent in intermediate microeconomics with calculus.

Learning Outcomes:

--Students will learn through lectures, labs, homework, exams and readings to master microeconomic theory to a level that enables students to critically analyze research articles published in leading applied economic theory journals.

--Students will learn the methods of microeconomic theory that, in conjunction with other core classes, will provide the foundation for independent research in many fields of economics.

--Students will develop their mathematical and analytical skills to the level expected in the second graduate microeconomics, Econ 7342, and master microeconomic theory to a level that enables them to pass the Ph.D. qualifying exams in microeconomic theory

Course Outline (additional readings may be added)

Topic	Readings
1. ***Introduction*** and Mathematical Treatment of Demand and Supply	JR & MWG—mathematical appendices; SS ch. 1
2. Producer Theory	
a. Production Technology	JR 3.1-3.2 MWG 5.a-5.b V ch.1
b. Profit Maximization, Profit Functions and Supply	JR 3.5 MWG 5.c, 5.e V chs. 2 & 3
c. Cost Minimization and Conditional Factor Demands	JR 3.3 MWG 5.c-5.e V chs. 4 & 5
d. Duality—Technology and Costs	JR 3.4 MWG 5.c-5.d V ch.6
3. ***Consumer Theory***	
a. Preferences and Utility	JR 1.1-1.2 MWG ch. 1, 3.a-3.c
b. Consumer Choice and Marshallian Demand	JR 1.3 MWG ch. 2, 3.d
c. Expenditure Functions and Hicksian Demand	JR 1.4-1.5 MWG ch. 3.e
d. Duality—Utility and Expenditure, Slutsky Equation, Integrability, Inverse Demand	JR 1.5, 2.1-2.2 MWG 3.f-3.h
4. Consumer Demand Topics	
a. Welfare Evaluation of Economic Changes to Consumers—Consumer surplus, equivalent variation and compensating variation	JR 4.3 MWG 3.i
b. Revealed Preference-Weak and Strong Axioms	JR 2.3 MWG 2.f, 3.j
a. Aggregation	MWG ch. 4
5. ***Consumer Choice under Uncertainty***	JR 2.4 MWG ch. 6
6. ***Partial Equilibrium, Efficiency and Welfare*** – Comparing Competitive and Monopoly Outcomes	JR ch.4 MWG ch. 10, 12.a-12.b