ECON 7341– Section 17266
MICROECONOMIC THEORY I
Meets MW 1-2:30 in M 107 (McElhinney Building)

Office:	201B McElhinney (M)
hours:	MW 5:30-7pm or by appointment 713-743-3799
email:	jkohlhase@uh.edu
web pages:	http://www.uh.edu/~kohlhase (general information)
	http://www.uh.edu/blackboard (class website, use Blackboard Learn;
	password access)

TA: Xuejing Zuo, a 4th year PhD student in economics. Office--room 250 McElhinney. Office hours by appointment—contact her by email at xuejingzuo84@gmail.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. This course provides an in-depth coverage of the modern microeconomic theory of economic choices made by individual consumers and firms. The course also examines non-strategic markets such as perfect competition (both partial and general equilibrium versions) and monopoly. Topics covered include special classes of preferences and production functions, choice under uncertainty, measures of welfare at various levels—consumer, one market, and many markets in general equilibrium. The course uses mathematical methods typically 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 asymmetric information, 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 1-2:30 and are taught by me. The lab is held on Fridays from 11:00am-1pm in the economics conference room, room 212M, and is 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 website.

Required Textbooks:

  (JR) G.A. Jehle and P.J. Reny*, **Advanced Microeconomic Theory**, 3rd edition, Financial Times Prentice Hall (an imprint of Pearson), 2011, ISBN-13: 978-0-273-73191-7.

  (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 treatment of PhD-level microeconomic theory than the above two books.

  Kreps, David. ***A Course in Microeconomic Theory***, Princeton University Press, 1990. A more "chatty" text than the above three books.

  (NS) W. Nicholson and C. Snyder, ***Microeconomic Theory: Basic Principles with Extensions,*** 11th ed., Southwestern/Cengage Learning, 2008, 2012. Micro theory at the "masters-level." Easier than the above three books, a good transition book between undergrad intermediate and graduate advanced courses. Earlier editions (some with only Nicholson as the author) are also fine. This book is more advanced 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.

  (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.

  (SB) C. P. Simon and L. Blume, ***Mathematics for Economists***, Norton, 1994. Good on optimization, concave functions, homogeneous functions.

  A. C. Chiang and K. Wainwright, ***Fundamental Methods of Mathematical Economics***, 4th ed., McGraw-Hill Irwin, 2005 (or any edition; earlier editions authored solely by Chiang). The classic math-econ book written at a lower level than *SS* and *SB.*

Course Evaluation: 30% Midterm (Wednesday October 14, 2015 in class)
       55% Final Exam (Monday December 14, 2015, 2-5pm)
       15% 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 UH Academic Honesty guidelines at URL: http://www.uh.edu/provost/academic-affairs/policy-guidelines/honesty-policy/index.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 Review of Competitive and Monopoly Markets*	Math review: JR & MWG— mathematical appendices; SS ch. 1 Markets: JR ch. 4, NS chs. 12, 14
2. *Producer Theory*	
a. Production Technology	JR 3.1-3.2 MWG 5a-5b V ch.1 SB chs. 20 & 21
b. Cost Minimization and Conditional Factor Demands	JR 3.3 MWG 5c-5d V chs. 4 & 5
c. Duality—Technology and Costs	JR 3.4 MWG 5c-5d V ch.6
d. Profit Maximization, Profit Functions and Supply	JR 3.5 MWG 5c-5d V chs. 2 & 3
3. *Consumer Theory*	
a. Preferences and Utility	JR 1.1-1.2 MWG ch. 1; 3a-3c
b. Consumer Choice and Marshallian Demand	JR 1.3 MWG ch. 2; 3d
c. Indirect Utility, Expenditure Functions and Hicksian Demand	JR 1.4-1.5 MWG 3e
d. Properties of Demands; Duality—Utility and Expenditure, Slutsky Equation	JR 1.5, 2.1-2.2 MWG 3f-3h
e. Revealed Preference	JR 2.3 MWG 1.2-1.3

4. *Consumer Choice under Uncertainty*	JR 2.4 MWG ch. 6 Machina (1987)

5. *Partial Equilibrium, Efficiency and Welfare* –
   Comparing Competitive and Monopoly
   Outcomes, Pareto Optimality
	JR ch.4
	MWG ch. 10; 12a-12b

6. Simple General Equilibrium, Efficiency and Welfare in exchange economies
   Edgeworth box, exchange economies, the
   core, existence of competitive equilibrium,
   fundamental welfare theorems
	JR 5.1, 5.2
	V ch. 17, 21.1
	MWG 15, 16c-f

7. Some Challenges to Neoclassical Micro Theory: *A quick look at Behavioral Economics*	DellaVigna (2009)

Articles (more may be assigned during the semester):

Machina, Mark (1987), "Choice Under Uncertainty: Problems Solved and Unsolved," *Journal of Economic Perspectives*, vol. 1:121-154.

DellaVigna, Stefano (2009), "Psychology and Economics: Evidence from the Field," *Journal of Economic Literature*, vol. 47, pp. 315-372.