ECONOMICS 8100
APPLIED MICROECONOMICS ANALYSIS

Fall 2017
3:00pm-4:15pm Monday/Wednesday, Langdale Hall 301
Yongsheng Xu

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It should be noted that this course syllabus provides a general plan for the course and deviations may be necessary.

Statement on Academic Honesty: Students are expected to abide by GSU’s policy on academic honesty, which is published in the student handbook. A portion of this policy follows:

“... As members of the academic community, students are expected to recognize and uphold standards of intellectual and academic integrity. The University assumes as a basic and minimum standard of conduct in academic matters that students be honest and that they submit for credit only products of their own efforts ... . The student is responsible for understanding the legitimate use of resources; the appropriate ways of acknowledging academic, scholarly, or creative indebtedness; and the consequences of violating this responsibility” [Please see the Policy on Academic Honesty (Section 409).]

If you have questions about academic honesty, please see me.

Catalog description: This course provides comprehensive coverage of microeconomic topics by analyzing the applications of the theory. A mathematical and intuitive approach is stressed. Topics include both standard and the new consumer theory, production and cost analysis, modern theories of the firm and markets, and basic welfare economics.

Learning objectives: By learning the theory through mastering its problem solving potential, the student gains an appreciation for economics as a way of thinking about
the world and a methodology rather than merely a series of topics. Given the varied backgrounds and degree programs of the students, students are given a wide variety of applications so as to generate a functional mastery of microeconomic techniques that they will confront in the academic literatures in their own fields.

**Course Policies:** Regular attendance is expected. I may withdraw you from the course for excessive absences without your permission or prior notification of excessive absences. No late homework is accepted, no make-up exams are offered. Extenuating circumstances will be handled on an individual basis. Be considerate to others: (a) Showing up late or leaving early is inconsiderate to the instructor and to your classmates. Please: don’t do it. (b) The noises we make when we’re getting ready to leave (such as shoving things in backpacks and zipping them up) are distracting when class is not yet over. You’ll always be dismissed promptly at the end of class. Please: do not rustle your things beforehand. (c) Any electronic devices that could be heard by others must be turned off before class, and, of course, as a courtesy and show of respect we don’t engage in web surfing or texting during class. (d) Students are expected to be familiar with Georgia State University’s Policy on Academic Honesty (Section 409). Here is a link to Section 409: http://www2.gsu.edu/wwwfhb/sec409.html. (e) The Course website (on D2L) is an integral part of the class; please check it on a regular basis.

Others: (1) Students who wish to request accommodation for a disability may do so by registering with the Office of Disability Services. Students may only be accommodated upon issuance of the Office of Disability Services of a signed Accommodation Plan and are responsible for providing a copy of that plan to instructors of all classes in which accommodation is sought. (2) Your constructive assessment of this course plays an indispensable role in shaping education at GSU. Upon completion of the course, please take time to fill out the online course evaluation.

**Prerequisites:** Economics 8100 requires a course in intermediate microeconomics, Economics 3910, and the prior completion of a course in mathematics at the level of calculus or higher (equivalent to Economis 6030 or MGS 9910).

Do you need to take multi-variable calculus before taking Econ 8100? No. The required math in Economics 6030 or MGS 9910 is sufficient for Economics 8100.

**Texts:** You need not purchase a text for this class. But if you prefer a text, I
recommend:


The notes for each lecture will indicate the relevant sections in the recommended text.

**Evaluation:** Grades will be based on:
25%: Mid-term exam I: Wednesday, September 27 (in class)
25%: Mid-term exam II: Wednesday, October 25 (in class)
20%: Problem sets
30%: Final exam: Monday, December 11, 1:30pm-4pm

When computing the average problem set score to enter your grade, your lowest individual score will be dropped. Given that this is a graduate class, I expect that most of you will get either A(A+, A, A-) or B(B+, B, B-). A grade of C or less would be rare.

**Problem Sets:** Problem sets will be posted on the class website via iCollege and their due dates (typically on Wednesdays) are listed in the schedule below. You can download them from the class website on the dates they are assigned. Late problem sets will not be accepted. (The ability to drop your lowest score gives you protection against accidents.) In particular, problem sets must be received in class by the end of lecture on the day the problem set is due. (Under the appropriate circumstances, including a Dean’s excuse, you may be excused from a problem set without penalty.) Problem sets will be handed back to you in class the Monday immediately after the due date.
Outline and schedule:

PART I. INDIVIDUAL CHOICE

I.1 The Basic Model of Consumer Choice
   Wednesday, August 23: Modeling Consumer Choice
   Monday, August 28: Optimization
   Problem Set 1, due Wednesday, September 6
   Wednesday, August 30: Demand
   Wednesday, September 6: Elasticity
   Problem Set 2, due Wednesday, September 13
   Monday, September 11: Maximizing Utility

I.2 Applications
   Wednesday, September 13: Labor Supply
   Problem Set 3, due Wednesday, September 20
   Monday, September 18: Time
   Wednesday, September 20: Consumer Surplus
   Some practice exam questions and their answers will be posted on
   the class website before or on Wednesday, September 20.
   Monday, September 25: Risk
   Wednesday, September 27: Exam I
   Problem Set 4, due Wednesday, October 4
   Monday, October 2: Risk Pooling and Insurance
   Wednesday, October 4: Valuing Life
   Problem Set 5, due Wednesday, October 11

I.3 The Foundations of Utility
   Monday, October 9: Utility: Does it Make Sense?

Part II. FIRMS

Wednesday, October 11: Profit Maximization
   Problem Set 6, due Wednesday, October 18
PART III. COMPETITIVE MARKETS

Monday, October 16: A Partial Equilibrium Model
   Problem Set 7, due Wednesday, October 25
Wednesday, October 18: A General Equilibrium Model
   Some practice exam questions and their answers to be posted before or on Wednesday, October 18
Monday, October 23: Efficiency of Competitive Equilibrium
Wednesday, October 25: Exam II
Monday, October 30: Existence of Competitive Equilibrium
   Problem Set 8, due Wednesday, November 1
Wednesday, November 1: Production Economies

Part IV. MARKET FAILURE

Monday, November 6: Monopoly
   Problem Set 9, due Wednesday, November 15
Wednesday, November 8: Oligopoly
Monday, November 13: Public Goods and Externalities
   Problem Set 10, due Wednesday, November 15
Wednesday, November 15: Information: Signaling
   Problem Set 11, Practice only
Monday, November 27: Information: Adverse Selection and Moral Hazard

Final exam: Monday, December 11, 1:30pm-4pm