ECON 6202: Advanced Microeconomic Theory

Syllabus for Fall 2016
5:30 p.m. — 8:15 p.m. M
Center City building, 604

Instructor: Dmitry Shapiro
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Office hours: 2:00-5:00 W, or by appointment.

Course Description and Prerequisites: ECON 6202. The only prerequisite for this course is admission to graduate program. In this course I am going to cover topics of consumer and producer theory, partial and general equilibrium analysis and game theory.

Course Objectives: The objective of this course is to provide rigorous treatment of a modern microeconomic theory. The course is very mathematically intense, all main results are given with formal proofs.

Reading: the course will closely follow my notes that are available at


• New (third) edition is published by Prentice Hall, April 2011. ISBN: 0273731912. The third edition contains new topics such as Game Theory, Bayesian Games and Mechanism Design.

Course Requirements and Grading: The grades will be determined as follows:

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<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Problem Sets</td>
<td>20%</td>
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<tr>
<td>Midterm</td>
<td>30%</td>
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<tr>
<td>Final Exam</td>
<td>50%</td>
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Test dates: The midterm will be on October 17 during the class time. The final exam is scheduled on December 12 from 5pm to 7:30pm. It is the registrar office that schedules the exams, so it’s always a good idea to check their website in case they change it. The final exam will be cumulative.

Problem Sets: There will be approximately one problem set every other week. You will work on Problem Sets in three to four people groups. Only one Problem Set needs to be submitted from the entire group. Problem Sets are an essential part of the course so you want to make sure that you put your best efforts into them.
A Tentative Course Outline
N - notes, JR - Jehle and Reny, 2nd edition

1. Introduction.

   Preferences and Utility (N 1; JR 1.2); The Consumers Problem (N 2.1; JR 1.3); Indirect Utility and Expenditure Functions (N 2.2; JR 1.4); Properties of Consumer Demand (N 2.3; JR 1.5); Revealed Preference (N 3; JR 2.3).

   Objective Probability and Expected Utility (N 4.1; JR 2.4); Subjective Probability (N 4.2; JR 2.4); Risk Aversion (N 4.3-4.4; JR 2.4).

   Production Functions (N 5.1; JR 3.2); Cost Functions (N 5.2; JR 3.3); Profit Maximization (N 5.3; JR 3.5).

5. Partial Equilibrium.
   Perfect Competition (N 6; JR 4.1); Equilibrium and Welfare (N 6; JR 4.3).

   The Edgeworth Box Exchange Economy (N 7; JR 5.1); Exchange Economies (N 7.1; JR 5.2); The Efficiency of Competitive Equilibria (N 8; JR 5.2.2); General Equilibrium with Production (N 9; JR 5.3).

7. Monopoly.
   Monopoly (N 11); First-, Second- and Third-Degree Price Discrimination (N 12).

8. Information Economics.
   Adverse Selection (N14; JR 8.1).

9. Game Theory.

10. Review