ECON 6202: Advanced Microeconomic Theory
Syllabus for Spring 2013
6:30 p.m. — 9:15 p.m. M
Friday 128

Instructor: Dmitry Shapiro
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Office hours: 3:30-6:30 M, 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
http://belkcollegeofbusiness.uncc.edu/dashapir/lectures.pdf;

- 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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<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Problem Sets</td>
<td>15%</td>
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<tr>
<td>Midterm</td>
<td>35%</td>
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<tr>
<td>Final Exam</td>
<td>50%</td>
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Test dates: The midterm is going to be (tentatively!) on February 25 during the class. The date of the final exam will be announced as soon as the Registrar makes it available.

Problem Sets: There will be approximately one problem set every week with a total of 10 problem sets. Problem Sets are an essential part of the course so you want to make sure that you put your best efforts into them. You should submit your work individually but discussions are encouraged.
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 Ex-
   penditure 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).

   Externalities; Public Goods; Pigouvian Taxes; Coase Theorem (N 10).

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

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

10. Game Theory.

11. Review