Econ 601  
Microeconomic Theory  
FALL 2014

Instructor: Prof. Huseyin Yildirim, Soc. Sci. 205, phone: 660-1805, email: Huseyin.Yildirim@duke.edu

TAs: Maya Ward, email: maya.ward@duke.edu; Congshan Zhang, email: congshan.zhang@duke.edu

Time and Location: TuTh: 8:30-9:45 AM, Soc Psy 130  
Office Hours: Tu: 10:00-11:00 AM (Yildirim)/ Fri: 10:00-11:00 AM (Soc. Sci. 327) (Ward)/ Th: 6:00-7:00 PM (Soc. Sci. 111) Zhang (TBA)  
TA Sessions: M: 6:30-7:30 PM Soc Psy 130  
Note: Physics 130 on Sep. 22nd and Oct. 13th

Textbooks:

- (Required) Advanced Microeconomic Theory by G. Jehle and P. Reny, 3rd Ed.
- (Optional) Microeconomic Analysis by Hal Varian

Objective: This course reviews basic microeconomic topics such as consumer and producer theories, partial and general equilibrium, and if time permits, more modern topics such as public good provision, and the principal-agent problem. During the review, formal arguments will be used, with an eye on applied aspects of the theories. Good knowledge of calculus is required.

Grading: There will be 1 midterm and 1 final exam as well as 3-4 hws. They will count toward the grade as follows.

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>HW</td>
<td>10%</td>
</tr>
<tr>
<td>Midterm</td>
<td>40%</td>
</tr>
<tr>
<td>Final</td>
<td>50%</td>
</tr>
</tbody>
</table>

No notes or books will be allowed in the exams.

Tentative Schedule:

- **Consumer Theory**
  Preferences and Utility: Preference Relation/Existence of Utility Function  
  Choice: The Indirect Utility/Expenditure/Duality  
  Demand: Slutsky Equation/Elasticity/Consumer’s Surplus  
  Revealed Preference  
  Uncertainty and Risk Aversion

- **Producer Theory**
  Technology: Returns to Scale/Technical Rate of Substitution  
  Cost Function and Its Properties  
  The Competitive Firm: Profit Function/Supply  
  (MIDTERM EXAM: Oct. 21, Th, in class)

- **General Equilibrium**
  A Pure Exchange Economy: Core/Pareto Efficiency/Walrasian Equilibrium/Welfare Theorems

- **More Modern Topics**
  The Principal-Agent Problem  
  Public Good Provision  
  (FINAL EXAM: Dec. 9, Tu., 9:00 – Noon, in class)