Instructor: Prof. Huseyin Yildirim, Soc Sci 205, phone: 660-1805, email: hy12@duke.edu

TAs: Rudolf Oberg, email: rudolf.harri.oberg@duke.edu; Feifan (Frank) Zhang, email: feifan.zhang@duke.edu

Time and Location: TuTh 3:05 - 4:20PM, Gross Hall 107
Office Hours: Tu: 1:30 - 2:30 PM (Yildirim)/ M: 4:30-5:30 PM (Soc Sci 119) (Rudolf)/ Fri: 4:30-5:30 PM (TBA) Zhang


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 multivariate calculus is required.

Grading: There will be 1 midterm, 1 final exam, and 3-4 homework assignments, with the following weights.

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</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. 27th, Tu, 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
  CLASSES END ON NOV. 24
  (FINAL EXAM: Dec. 8th, Tu., 7:00 - 10:00 PM, in class)