Instructor: Prof. Huseyin Yildirim, Soc Sci 205, Phone: 660-1805, E-mail: hy12@duke.edu
TAs: Attila Gyetvai, E-mail: attila.gyetvai@duke.edu; Yuge Hao, E-mail: yuge.hao@duke.edu
Time and Location: TuTh 3:05 - 4:20PM, Gross Hall 107
Office Hours: Tu: 1:30 - 2:30 PM (Yildirim)/ M: 3:00-4:00 PM (Soc Sci 113) (Attila)/ Fri: 3:00-4:00 PM (Soc Sci 111) (Yuge)
TA Sessions: M: 4:30-5:30 PM (Soc Sci 139)
Textbooks:
- (Required) *Advanced Microeconomic Theory* by G. Jehle and P. Reny, 3rd Ed.
- (Optional) *Microeconomic Analysis* by Hal Varian
- (Optional) *Mathematics for Economists* by Carl P. Simon, Lawrence E. Blume

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 2 exams and 3-4 homework assignments, with the following weights.

<table>
<thead>
<tr>
<th>Homework</th>
<th>10%</th>
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<tbody>
<tr>
<td>Exam 1</td>
<td>45%</td>
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<tr>
<td>Exam 2</td>
<td>45%</td>
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No notes or books will be allowed in the exams.

Re-grading Policy: Once exams are returned, you have 2 days for a re-grade request. Please write down the question # and your rebuttal, and submit it to me or the TAs. Note that since grading mistakes can happen in both directions, your entire exam, not just the specific questions, may be re-evaluated.

Special Exam Accommodations: As per the new University rule, students with “approved accommodations” must inform the professor, preferably at the beginning of the semester.

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
  (EXAM 1: Oct. 20, Th, in class)
- **Producer Theory**
  - Technology: Returns to Scale/Technical Rate of Substitution
  - Cost Function and Its Properties
  - The Competitive Firm: Profit Function/Supply
- **General Equilibrium**
  - A Pure Exchange Economy: Core/Pareto Efficiency/Walrasian Equilibrium/Welfare Theorems
- **More Modern Topics**
  - The Principal-Agent Problem
  - Public Good Provision
  (EXAM 2: Dec. 1, Th., in class)