Instructor: Prof. Huseyin Yildirim, Soc Sci 205, Phone: 660-1805, E-mail: hy12@duke.edu
TA: Xiao Peiran, E-mail: peiran.xiao@duke.edu
Time and Location: TTh 1:25 - 2:40 PM, Soc Sci 119
Office Hours: TTh: 3:00 - 4:00 PM, Soc Sci 205

Note: The textbook is a fun, concise read of the material. We will use it as a reference, but the formal treatment will be more technical, comparable to Intermediate Microeconomics, and based mostly on my own notes.

Course Description: IO is the study of oligopolistic markets in which only a small number of firms operate. Beginning with the basic oligopoly models, Bertrand vs. Cournot, the consequences of strategic behavior on collusion, price discrimination, product differentiation, advertising, entry/exit, and technology will be examined. The analysis will be formal, and utilize concepts and techniques from Intermediate Microeconomics. Basic calculus is needed.

Grading: Your grade will be based on two exams, a paper summary, and 6-8 problem sets, with the following weights:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Problem sets</td>
<td>10% (Drop lowest two)</td>
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<tr>
<td>Paper Summary</td>
<td>20%</td>
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<tr>
<td>Midterm</td>
<td>30%</td>
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<tr>
<td>Final</td>
<td>40%</td>
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No notes or books will be allowed in the exams. Makeup exams will be given only in case of a dean’s or doctor’s excuse.

Paper Summary: In consultation with the professor, you are expected to pick a theory paper related to IO topics, and write a 5-7 page summary: (1) the paper’s main idea (1/2 page), (2) the model (players, actions, timing of actions, equilibrium concept, etc.) (1-2 page), (3) one or two formal results (1-2 pages), (4) intuition behind the results (1-2 pages), and (4) a discussion of the paper’s weaknesses (1 page).

Re-grading Policy: Once midterm 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. Note that since grading mistakes can happen in both directions, your entire exam, not just the specific questions, may be re-evaluated. Note also that since official grades have to be submitted right after, a rebuttal for the final exam is possible only at the beginning of the following semester, though you may inquire about an earlier meeting time with me.

Special Exam Accommodations: Per the University rule, students with “approved accommodations” must inform the professor, preferably at the beginning of the semester.
Tentative Schedule:

- **Warming up**
  
  Ch.1: What is industrial organization?
  Ch.7: Games and strategy

- **Monopoly**

  Ch.5: Monopoly and regulation

- **Basic Oligopoly Models: Bertrand vs. Cournot**

  Ch.8: Oligopoly competition
  Ch.9: Collusion and price wars
  Ch.10: Market structure and market power
  MIDTERM EXAM (Thursday, Feb. 21, in class)

- **Price and Nonprice Strategies**

  Ch.6: Price Discrimination
  Ch.13: Vertical Relations
  Ch.14: Product Differentiation advertising

- **Innovation**

  Ch.15: Incentives, diffusion, and public policy

- **Economics of Contracts** (If time permits)

  FINAL EXAM (Friday, May 3, 7:00 - 10:00 PM in class)