**Prerequisites:** A working knowledge of graduate microeconomic theory, game theory, econometrics, and introductory industrial organization.

**Required Textbooks:**

**Review Textbooks:**

**Supplementary Books:**

**Course Objectives:** To understand both the important theoretical and empirical models associated with advanced industrial organization. The focus will be on the development and testing of new theories that have important public policy implications. Each week we will analyze one or more papers from the outline below. To fully understand these papers, you will need to read the preceding “classics” and review articles. The instructor will provide suggestions as we go.
**Grading:** Each student will be expected to make a presentation on several required journal articles that are listed on the reading list. These will be assigned by the instructor. Students will also be expected to write a referee report and a term paper. The article for the referee report will be assigned by the instructor. Students are required to write a research proposal. Ph.D. students are encouraged to use their research proposal as a platform for their IO field paper requirement, after appropriate extension, revision, and polishing. The weights are as follows:

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<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Referee Report</td>
<td>10%</td>
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<tr>
<td>Class Presentations</td>
<td>20%</td>
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<tr>
<td>Research Proposal</td>
<td>30%</td>
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<tr>
<td>(due at the last class period in the 9th week of classes)</td>
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<tr>
<td>Final Exam (take home exam)</td>
<td>40%</td>
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**Course Outline and Readings:**

*most important readings*

1. **Review Material**

   A. Modeling in Economics

   B. Empirical Methods and IO
   - Outline for Empirical Research

   C. Overview of Industrial Organization
   - (T) Introduction
   - (M) Chs. 5 and 6

1The report should be typed and about 4-5 pages long, double spaced. In your report, please: 1) write a brief summary of the paper, 2) indicate the main strengths and weaknesses of the paper, 3) indicate how the paper might be improved, and 4) state how the paper could be extended in future research.
D. Game Theory
(T) Ch. 11.

2. Pricing Under Monopoly and Imperfect Competition
A. Static and Dynamic Settings
*(T) Chs. 1, 3, 5, and 6
(V) Chs. 4 and 5

B. Price Wars and Preemption Races

A. Measurement
*(M) Ch. 11 (pp. 335-339)
(T&T) Ch. 3.

B. Theory of Entry Barriers
*(M) Ch. 11 (pp. 341-360)
*(S1) Chs. 1-3

C. Empirical Evidence
(T&T) pp. 45-63

4. The Measurement of Market Power
A. The New Empirical Industrial Organization (NEIO)
B. Cartels
C. NEIO in Dynamic Markets
D. Game Theoretic Approach
E. Empirical Applications
5. Product Differentiation, Advertising, and Social Welfare

A. Introduction

*(T) Ch. 2 (especially pp. 95-104)

B. Horizontal-Vertical Differentiation and Persuasive-Informative Advertising

*(T) Ch. 7 (especially pp. 277-289)
C. Advertising, Name Brands, and Welfare
*(T) pp. 115, 289-295
(T&T) pp. 227-229.
D. Advertising and Demand Rotation


F. Empirical Evidence-- Branded vs Generic Products (Klein-Leffler Hypothesis)

Png and Reitman, "Why are some Products Branded and Others Not?" *JLE*, April 1995.


G. Hedonic Pricing


6. Dynamic Issues in Industrial Organization

A. Review of Dynamic Programming Techniques

(N) Ch. 11.

B. Dynamic Programming Applications to Industrial Organization

1) Learning-By-Doing

(T) pp. 71-72


2) Market Power in Dynamic Markets


3) Optimal Pricing: Declining (mass market) vs Increasing (niche market) Prices over Time
C. Other Dynamic Applications


7. Comparative Statics and Imperfect Competition

A. Introduction


B. Supermodular Games

(Sun) Ch. 10, “Supermodularity and Parameteric Monotinicity”


