220A- Industrial Organization

This course provides a graduate-level introduction to Industrial Organization (IO), with a focus on empirical methods and applications. It is designed to introduce Ph.D. students to a variety of methods, topics, and industries in the field with the goal of preparing them to conduct thesis research in this area. The methods and topics may be of interest to graduate students in other sub-fields of economics.

Lectures: Tuesday 12 PM – 2 PM, 639 Evans

There is no required textbook for the course, as most readings are academic journal articles that you should be able to access online. A recommended reference that discusses many theoretical underpinnings of these empirical papers is:


Another valuable resource that there will be readings from is the *Handbook of Industrial Organization* (HIO1, 2, 3) published by Elsevier-North Holland in 1987 (1 and 2) and 2007 (3).

Course Requirements: Grading for the course will be based on three problem sets (30%), one referee report (20%), and one research proposal (50%). Students should attend the ECO 221 IO seminar series.

The problem sets will be primarily computational exercises that will require you to write code in STATA and MATLAB in order to answer empirical economic questions that follow the course material. Problem Set 1 will be due on Thursday, February 16. Problem Set 2 will be due on Thursday, March 8. Problem Set 3 will be due on Thursday, April 19. These problem sets can be done in up to groups of three.

The referee report will require you to critically evaluate recent research papers in IO. It will be due on Thursday, March 22. Students will receive a list of potential papers to choose from in the first few weeks of class. Additional papers will be allowed on request. Reports will be distributed to the class, and I will select several for in class presentations in April.

Your research proposal will be a clearly-defined original research project that builds on the material discussed in the course or closely related material. The first draft of this proposal will be due on Thursday, April 5. After receiving comments, your final proposal will be due on Thursday, May 3. This can be done in groups of up to three. Students will present their ongoing proposals in class in April. Detailed instructions will be provided in early February.

In the reading list that follows starred items are especially important. The reading list is extensive and is meant to be a reference; you do not have to read all of the paper on this list. However, you are expected to read all of the papers we discuss in detail in class. Starred items should be read in advance of the week they are to be discussed in class.

The following abbreviations are used for journal titles:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Journal Title</th>
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<tbody>
<tr>
<td>AER</td>
<td>American Economic Review</td>
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<tr>
<td>BJE</td>
<td>Bell Journal of Economics</td>
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<tr>
<td>EMA</td>
<td>Econometrica</td>
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<td>EJ</td>
<td>Economic Journal</td>
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<tr>
<td>IJIO</td>
<td>International Journal of Industrial Organization</td>
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<tr>
<td>JE</td>
<td>Journal of Econometrics</td>
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<tr>
<td>JEH</td>
<td>Journal of Economic History</td>
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<tr>
<td>JEL</td>
<td>Journal of Economic Literature</td>
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<tr>
<td>JEMS</td>
<td>Journal of Economics &amp; Management Strategy</td>
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<tr>
<td>JEP</td>
<td>Journal of Economic Perspectives</td>
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<tr>
<td>JET</td>
<td>Journal of Economic Theory</td>
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<tr>
<td>JIE</td>
<td>Journal of Industrial Economics</td>
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<tr>
<td>JLE</td>
<td>Journal of Law and Economics</td>
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<tr>
<td>JPE</td>
<td>Journal of Political Economy</td>
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<tr>
<td>QJE</td>
<td>Quarterly Journal of Economics</td>
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<tr>
<td>RJE</td>
<td>Rand Journal of Economics</td>
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<tr>
<td>ReStat</td>
<td>Review of Economics and Statistics</td>
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<tr>
<td>ReStud</td>
<td>Review of Economic Studies</td>
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I. Introduction to Empirical Industrial Organization


II. Empirical Studies of Pricing and Demand

Static Models


Tirole, chap. 5, Section 2.1 (pp. 96–100); Sections 7.1, 7.2, 7.5 (pp. 279–88, 296–300).

Repeated Interaction


Differentiated Products


**Welfare Measures Computed From Estimated Demand Systems**


**Price Discrimination – Static**


I. Stole, “Price Discrimination and Competition,” HIO3, Chapter 34.

H. Varian, “Price Discrimination,” HIO1, Chapter 10.

Price Discrimination – Dynamic


### III. Market Structure and Competition

**Horizontal Market Structure & Antitrust**


Vertical Market Structure & Antitrust


S. Tadelis, “Complexity, Flexibility, and the Make-or-Buy Decision” AER, 2002, 433-437


O. Williamson “The Vertical Integration of Production: Market Failure Considerations,” AER, May 1971, pp. 112-123.


Entry


* S. Berry, and J. WaldFogel, “Free Entry and Social Inefficiency in Radio Broadcasting,” RJE, 1999, 397-420


### IV. Choice Frictions: Search Costs and Switching Costs

#### Search Costs


#### Switching Costs

V. Asymmetric Information and Product Quality


VI. Insurance Markets


A. Kowalski, Censored Quantile Instrumental Variable Estimates of the Price Elasticity of Expenditure on Medical Care, Yale University working paper, 2010.


VII. IO and Non-Traditional Foundations

Consumers


**Firms**


**VIII. Special Topics**

**Health Care Markets**


* K. Ho, “Insurer-Provider Networks in the Medical Care Market,” *AER*, 2009, 393-430.


**Auctions**


**Development and IO**


**Energy Markets**

**Productivity and Industrial Organization**