Econ 712: Empirical Industrial Organization

The course provides a graduate-level introduction to the topics and methods of Empirical Industrial Organization (IO). It is designed to provide a broad introduction to topics and industries that current researchers are studying as well as to expose students to a wide variety of techniques. It will start the process of preparing economics Ph.D. students to conduct thesis research in the area, and may also be of interest to doctoral students in other fields.

**Lectures:** Tuesday/Thursday 1:30-3:00, 101 PCPSE

**Office Hours:** By appointment

**TA:** Joao Granja de Almeida (joaog@sas.upenn.edu)

**Textbooks:** There is no textbook for this course.
For coverage of theoretical principles (that I will rely on, but not cover in any detail) see:

*J. Tirole, The Theory of Industrial Organization, MIT, 1988. (Tirole).*

For a broader coverage of empirical and public policy issues, you should also read:


You also might want to read several of the surveys in:


The two chapters from the *Handbook of Econometrics*, in the first section below, are probably the closest thing to a textbook for the material I will cover.

**Evaluation:** Grading will be based on several problem sets and an exam.

The reading list below covers a variety of topics. We will not have time to cover all these topics, or to cover all the papers in the topics we do cover. The list is meant as a future reference guide as much as it is meant as a guide to what we will cover. Starred items are most likely going to be covered in class (or are the place to start for topics we will not cover. We will not discuss all of the papers on the reading list, however, *I expect you to read all of the papers we discuss in detail 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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<td>EMA</td>
<td>Econometrica</td>
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<tr>
<td>JEM</td>
<td>Journal of Economics &amp; Management Strategy</td>
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<tr>
<td>JEL</td>
<td>Journal of Economic Literature</td>
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<td>JEM</td>
<td>Journal of Economic History</td>
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<tr>
<td>JIE</td>
<td>Journal of Industrial Economics</td>
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<td>JLE</td>
<td>Journal of Law and</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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I. Introduction


II. Production, Technology and Industry Structure


III. Empirical Studies of Pricing

1. Static Models


R. Schmalensee, “Inter-industry Studies of Structure and Performance,” in HIO2, Chapter 16.

2. **Repeated Interaction**

V. Aguirregabiria, “The Dynamics of Markups and Inventories in Retail Firms,” ReStud, April 1999, 275-308.


3. **Differentiated Products Industries**


**Computational, Instruments and Identification**


**Some Recent Papers**


4. Welfare and Hedonic Prices

**Hedonic Price Regressions and Price Indices**


**Welfare Measures Computed from Estimated Demand Systems**


M. Gentzkow, “Valuing New Goods in a Model with Complementarity: Online Newspapers,” AER, June
2007, 713-44.


IV. Market Structure

1. **Entry Models**


(*) F. Cilberto and E. Tamer, “Market Structure and Multiple Equilibria in Airline Markets,” EMA,
November 2009, 1791-1828.


2. Entry, Growth, and Turnover


V. Vertical Relations, Empirical Models of Bargaining and Related Topics


M. Sinkinson, “Pricing and Entry Incentives with Exclusive Contracts: Evidence from Smartphones” mimeo


Jason Allen, Robert C. Clark, Jean-François Houde. “Search frictions and market power in price negotiated markets”

VI. Estimation of Dynamic Models

1. Single Agent

Methods


Applications


Identification


2. Multi-Agent Models

Methods


Applications


VII. Antitrust

1. Introduction

(*) Whinston, Lectures on Antitrust Economics, Chapter 1

General readings


2. **Horizontal Mergers**


(*) *Whinston, Lectures on Antitrust Economics, Chapter 3.*


Kuhn, K.-U., “The Coordinated Effects of Mergers,” Chapter 3 in *Handbook of Antitrust Economics*.

**Theory of Merger Policy**


**Prospective Merger Analysis**


**Evidence on Merger Effects**


3. Vertical Mergers

Theory


Empirical Evidence


