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 1:30-2:50, via Zoom
- I will distribute slides, via Canvas, in advance of each lecture. My hope is to have a “preliminary” version a day or two before the lecture. In some cases, I might need to revise/edit the slides as I make final preparation for the lecture, in which case I will update the slides.
- In addition to the slides I will at times distribute notes or ask you to read a paper in advance of the lecture.
- The lectures will be just that: me mostly going over the slides in real time as I would in a “normal” year.
- I will record the lectures and post links to the recording. However, I encourage you to try to participate live.
- Q+A are a very important part of the class, especially in the current format. Questions help slow me down and make the class livelier. You need to do your part and come prepared to participate.
- During the lecture I ask that you keep your microphone muted, unless you want to ask a question, and your video ON.
- This plan might change as we go along so please send me your feedback.

Office Hours: By appointment (via Zoom, unless university rules permit in person meetings)

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

Evaluation: Grading will be based on several problem sets. The problem sets will be mostly empirical but will also ask you to review some papers and write a short research proposal.

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:
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.

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:

| AER   | American Economic Review | JET   | Journal of Economic Theory |
| BJE   | Bell Journal of Economics | JIE   | Journal of Industrial Economics |
| EMA   | Econometrica             | JLE   | Journal of Law and |
| EJ    | Economic Journal         | JPE   | Journal of Political Economy |
| IJIO  | International Journal of Industrial Organization | QJE   | Quarterly Journal of Economics |
| JE    | Journal of Econometrics  | RJE   | Rand Journal of Economics |
| JEL   | Journal of Economic Literature | ReStat | Review of Economics and Statistics |
| JEMS  | Journal of Economics & Management Strategy |

I. **Introduction**


II. **Production, Technology and Industry Structure**


August 2020. mimeo


III. Empirical Studies of Pricing

1. Static Models


D. Genesove and W. Mullin, “Testing Static Oligopoly Models: Conduct and Cost in the Sugar Industry,


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**


5. **Markups, Competition and Welfare**


IV. Market Structure

1. Entry Models


2. Entry, Growth, and Turnover


M. Mitchell, “The Scope and Organization of Production: Firm Dynamics Over the Learning Curve,”
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.


Theory of Merger Policy


Prospective Merger Analysis


Evidence on Merger Effects


### 3. Vertical Mergers

**Theory**


**Empirical Evidence**


Mullin, J.C. and W.P. Mullin (1997), “United States Steel’s Acquisition of the Great Northern Ore Properties: Vertical Foreclosure or Efficient Contractual Governance?,” *Journal of Law, Economics,
and Organization, 74-100.


