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: Wednesday 10 AM – 12 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. One textbook that might be useful as general reference on IO theory and classical work in IO is:


Another valuable resource for surveys of different IO topics is the Handbook of Industrial Organization (HIO1, 2, 3) published by Elsevier-North Holland in 1987 (1 and 2) and 2007 (3). These books and the Tirole book are simply potential background references and don’t enter into the primary course readings, so don’t feel obligated to buy them.

Here are some details on the main course logistics:

Course Requirements: Grading for the course will be based on two problem sets (20%), two referee reports (20%), and one research proposal (40%) and class participation (20%). Students should attend the ECO 221 IO seminar series whenever possible: this is a great way to learn about current research in IO.

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 Friday, March 7. Problem Set 2 will be due on Friday, April 19. These problem sets can be done in up to groups of three. I may add a third optional problem set for those interested that can be done on your own time either during or after the course.

The referee reports will require you to critically evaluate recent research papers in IO. The first report will be due on Friday, February 14. The second will be due on Friday, March 14. Students will receive a list of five potential papers to choose from for each report. Additional papers will be allowed on request. Reports will be distributed to the class, and two classes will be set aside for students to present their reports to the class.

Your research proposal will be a clearly-defined original research project that builds on the material discussed in the course or closely related material. Each student will schedule a meeting with me in the first two weeks of April to discuss their proposal (with a short outline of what they’re planning to do). After receiving comments, your final proposal will be due on Friday, May 9. This can be done in groups of up to three. Detailed instructions will be provided.

In the reading list that follows each section contains starred items which are especially important and will generally be covered in class. The reading list is extensive and most of it is meant to be a reference in case you’re interested in work in a particular area. You should read at least one or two starred papers per week in advance of class in order to benefit the most from the course.
The following abbreviations are used for journal titles:

- AER American Economic Review
- BJE Bell Journal of Economics
- EMA Econometrica
- EJ Economic Journal
- IJIO International Journal of Industrial Organization
- JE Journal of Econometrics
- JEH Journal of Economic History
- JEL Journal of Economic Literature
- JEMS Journal of Economics & Management Strategy

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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


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


IV. Insurance Markets


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


V. Choice Frictions: Search Costs and Switching Costs

Search Costs


Switching Costs


### VI. Asymmetric Information and Product Quality


VII. Behavioral IO

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**


**Internet Markets**


**Productivity and Industrial Organization**

**Schools**

* Christopher Nielsen, “Targeted Vouchers, Competition Among Schools, and the Academic Achievement of Poor Students,” Yale University working paper, 2013.