Spring 2022

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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. This course if part of the IO sequence this year with ECO 220C and students interested in this class should also strongly consider taking the half-semester PhD class in IO being taught in Haas by Matt Backus (Tu, 2-4 PM).

Lectures: Wednesday 10 AM – 12 PM, 597 Evans

Here are some details on the main course logistics:

Course Requirements: Grading for the course will be based on three problem sets (40%), two referee reports (20%), one research proposal (30%) and class participation (10%). 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 11**. Problem Set 2 will be due on **Friday, April 15**. These problem sets can be done in up to groups of three (working in a group is encouraged).

The referee reports will require you to critically evaluate recent research papers in IO. The first report will be due on **Thursday, February 17**. The second will be due on **Thursday, March 17**. Students will receive a list of five potential papers to choose from for each report. Additional papers will be allowed on request. Two classes in IO 220A 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 13**. This can be done in groups of up to three. Detailed instructions will be provided.

On average, I will cover two papers per week. Required readings are listed in the syllabus below. You should read all papers in advance of the class where they will be taught.

Outline of Topics by Week

Week 1 (January 19)	**Introduction to Empirical Industrial Organization**
Week 2 (January 26)	**Empirical Studies of Pricing and Demand (Differentiated Products)**
Week 3 (February 2)	**Empirical Studies of Pricing and Demand (Differentiated Products)**
Week 4 (February 9)	**Empirical Studies of Pricing and Demand (Differentiated Products)**
Week 5 (February 16)	**Insurance Markets**
Week 6 (February 23)	**Insurance Markets & Inertia**
Week 7 (March 2)	**Presentations from Referee Report # 1**
Week 8 (March 9)	**Vertical Market Structure**
Week 9 (March 16)	**Vertical Market Structure**
Week 10 (March 30)	**Vertical Market Structure**
Week 11 (April 6)	**Presentations from Referee Report # 2**
Week 12 (April 13)	**Search Frictions**
Week 13 (April 20)	**Behavioral IO**
Week 14 (April 27)	**Applications: Energy, Urban**
Week 15 (May 4)	**Data Acquisition and Frontier Topics**

Reading List

2	A. Nevo and M. Whinston, "Taking the Dogma Out of Econometrics: Structural Modeling and Credible Inference," CSIO working paper #0104, February 2010.
2	S. Berry, M. Gaynor and F. Scott Morton, "Do Increasing Markups Matter? Lessons from Empirical Industrial Organization," NBER working paper no. 26007, June 2019.
2-3	T. Bresnahan, "Competition and Collusion in the American Automobile Market: The 1955 Price War," *JIE*, June 1987, 457-482.
3-4	S. Berry, J. Levinsohn and A. Pakes, "Automobile Prices in Market Equilibrium," *EMA*, July 1995, 841-90.
4	A. Nevo, "Measuring Market Power in the Ready-to-Eat Cereal Industry," *EMA*, March 2001, 307-42.
4	A. Nevo, "A Practitioner's Guide to Estimation of Random Coefficients Logit Models of Demand," *JEMS*, Winter 2000, 513-48.

5 L. Einav, A. Finkelstein, and M. Cullen, "Estimating Welfare in Insurance Markets using Variation in Prices," *QJE*, 2010, 877-921.

5 B. Handel, I. Hendel and M. Whinston "Equilibria in Health Exchanges: Adverse Selection vs. Reclassification Risk," *EMA*, Aug. 2015, 1261-1318.

6 B. Handel, "Adverse Selection and Inertia in Health Insurance Markets: When Nudging Hurts," *AER*, Dec. 2013, 2643-2682.

6 B. Handel and J. Schwartzstein, "Frictions or Mental Gaps: What's Behind the Information We (Don't) Use and When Do We Care?," *JEP*, Jan. 2018.

8 K. Ho and Robin Lee, "Insurer Competition in Health Care Markets," *EMA*, Mar. 2017,379-417.

8-9 G. Crawford and A. Yurokoglu, "The Welfare Effects of Bundling in Multichannel Television Markets," Stanford University *AER*, 2012.

9-10 R. Lee, M. Whinston and A. Yurokoglu, "Structural Empirical Analysis of Contracting in Vertical Markets," in *Handbook of Industrial Organization*, forthcoming.

12 Read Section 4 in → A. Gavazza and A. Lizzeri, "Frictions in Product Markets," in *Handbook of Industrial Organization*, forthcoming.

13 Read Sections 5-7 in → P. Heidhues and B. Koszegi, "Behavioral Industrial Organization," in *Handbook of Behavioral Economics,*, Vol. 1, 2018.

14 P. Bayer, R. McMillian, A. Murphy and C. Timmins, "A Dynamic Model of Demand for Houses and Nieghborhoods," ECMA, May 2016, 893-942.

14 K. Springel, "Network Externality and Subsidy Structure in Two-Sided Markets: Evidence from Electric Vehicle Incentives," Georgetown working paper, 2019.

15 No required readings