Econ 259: Industrial Organization IIb

This course is part of the three-quarter sequence in industrial organization (IO). It covers selected topics of recent interest in industrial organization; unlike Econ 257, which covered many IO topics, each relatively briefly, in this class we plan to focus on a small set of topics, and cover each in greater depth and in more detail. The parallel IO class (Econ 258, taught by Jakub Kastl and Kyle Bagwell) is complementary, and students would certainly benefit from taking both 258 and 259; there shouldn’t be any overlap.

We strongly recommend the class to students in the economics department who intend to write theses in industrial organization. The class should also be useful for students working in other applied microeconomics fields who wish to learn about a wide range of approaches to empirical research and some specific methods used in IO. As a prerequisite, students should have completed Economics 257. Students with training in other applied fields should probably be able to follow the course as well, but check with one of us to see if you have adequate preparation.

Our goals in the course are to take students closer to the research frontier in several areas, and to help students acquire the skills required to write a thesis in IO and other fields of applied microeconomics. We hope to balance two objectives: learning how to identify and pose interesting questions, and learning how to formulate and execute empirical analysis that sheds light on these questions. We also plan to highlight the use of theory to guide hypothesis testing and the specification of empirical models.

In order to focus on the details of how to pose and answer interesting research questions in IO, we will cover a smaller number of topics in greater depth. This will allow us to highlight unanswered questions on the research frontier, as well as show how alternative empirical methods can be used to answer questions in the same area. Frank will lecture for the first half of the quarter and Liran will lecture for the second half.

Frank’s lectures will first focus on general strategies for undertaking empirical work in applied microeconomics. He will then describe empirical methods to estimate economic primitives such as production functions, individual and aggregate demand functions, and total factor productivity that are common to many contexts in applied microeconomics. The remainder of his lectures will focus on topics in regulatory economics, with a specific focus on energy and environmental markets, which are an increasingly popular topic because of the rich data available and well-defined market and regulatory rules governing their operation.

Liran’s lectures will focus on recent research on insurance markets and credit markets. Both markets are plagued with various aspects of asymmetric information, including moral hazard and adverse selection. The industrial organization and competitive environment of such markets is not well understood, and the increased availability of excellent data from these markets makes them great candidates for dissertation research.
Course logistics and requirements

The class meets on Tuesdays and Thursdays, 1:15-3:05 pm in Room 2 of the basement of the Art Building. Occasionally, the class will meet on Friday from 1:15-3:05 pm in this same location. We will be using Coursework to post material and send announcements.

Student requirements will include three components: problem sets that include programming and estimation exercises, assignments that require the students to write referee reports on existing working papers, and adequate reading and preparation before each class and periodic class presentations. The weighting of the final grade will be based on Class Participation/Presentations (20%), Homeworks (30%), and a take-home final exam (50%).

Class schedule (FW=Frank Wolak and LE=Liran Einav)

1. FW (1/4)
2. FW (1/6)
3. FW (1/11)
4. FW (1/14) (note this is a Friday – there is no class on Thu, 1/13)
5. FW (1/18)
6. FW (1/20)
7. FW (1/25)
8. FW (1/27)
9. FW (2/1)
10. FW (2/3)
11. LE (2/8)
12. LE (2/10)
13. LE (2/15) (note there is no class on Thu, 2/17)
14. LE (2/22)
15. LE (2/24)
16. LE (3/1)
17. LE (3/3)
18. LE (3/8)
19. LE (3/10)
20. LE (3/11) (note this is a Friday)
Reading List and Course Topics—Frank Wolak

1. Introduction to Structural Econometric Modeling


2. Empirical Models of Producer Behavior


3. Empirical Models of Consumer and Aggregate Demand Behavior


4. Productivity: Measurement and Stylized Facts


5. Estimating Demand and Cost Functions from Market Equilibria


6. Regulation with Full Information


Baumol and Bradford, "Optimal Departures from Marginal Cost Pricing," AER, June 1970

7. Regulation with Asymmetric Information


8. Supply Function and Multi-Unit Auction Markets


9. Measuring Unilateral Market Power and Market Performance


McRae, Shaun D. and Wolak, Frank A. “How Do Firms Exercise Unilateral Market Power: Evidence from Bid-Based Multi-Unit Auction Market,” March 2009. (draft on web-site)

10. Measuring Market Performance


Reading List and Course Topics—Liran Einav

(*)& paper discussed in class

1. Testing for Asymmetric Information in Insurance Markets

2. Estimating Demand for Insurance

3. Welfare in Insurance Markets
   - Bundorf, Levin, and Mahoney, “Pricing, Matching and Efficiency in Health Plan Choice,” working paper.

4. Additional topics in Insurance Markets
5. Economic Theory of Credit Markets


6. Liquidity, Information and Pricing in Subprime Lending


7. Credit Card Markets

8. Subprime Mortgage Market