Description of the course

This course focuses on empirical methods and applications of research topics in Industrial Organization. Although not exclusively, the course will focus mostly on the application of econometric techniques used to study specific markets and antitrust policies. The topics that will be covered include the evaluation of market power and mergers, product differentiation, investment and innovation, collusion, price discrimination, vertical relations, entry and product positioning, and the dynamics of industries. The course will also discuss research methodologies related to microeconomic theory, computational methods, and econometric analysis. The applicability of the techniques goes beyond the field of Industrial Organization, and include to Labor, Health, Trade and Public economics.

Evaluation

The requirements of the course are summarized as followed:

1. 2 computer assignments.

2. Presentations: (1) short 20-minutes presentations of 2nd year paper topic (end of April), and (2) 60-minutes presentation of 2nd year paper (end of May)

List of Topics

1 Homogenous Product Oligopolies


2 Horizontal mergers


3 Search and matching frictions


4 Dynamic discrete choice models

- **Investment:** Pakes (1986), Rust (1987)

5 Static models of entry and product positioning

- **Entry and differentiation:** Bresnahan and Reiss (1987), Bresnahan and Reiss (1990), Bresnahan and Reiss (1991), Berry (1992), Berry and Waldfogel (1999), Mazzeo (2001), Seim (2004), Barwick (2008).
• **Multiple equilibria:** Sweeting (2009), Ciliberto and Tamer (2004), Bajari, Hong, and Ryan (2004), Pakes, Porter, Ho, and Ishii (2005).

6 **Industry dynamics**


7 **Estimation of dynamic games**


References


Ellison, G. and S. Ellison (2007, April). Strategic entry deterrence and the behavior of pharmaceutical incumbents prior to patent expiration. working paper, MIT.


Ryan, S. P. (2006, October). The costs of environmental regulation in a concentrated industry. mimeo, MIT.


