Industrial Organization II for PhD ("Empirical IO")

Course Title: “Empirical” Industrial Organization (Static Models)
Instructor: Michael Kummer
Offered: Spring 2016
Method (hours per week): Lecture (3 hours) + Computational Exercise (inbuilt)
  • Mon. 17:05-19:55 in Room 310 (Old CE Building)
Course Level: 2nd year Ph.D.
Course Language: English
Prerequisites: Core Courses, in particular, Microeconomics and Econometrics
Evaluation:
  • 1-2 Homework assignments (computational exercise) (20%)
  • 5 Presentations (30%)
  • 5 Co-Presentations (15%)
  • Research proposal (30%)
  • Class and discussion participation (5%)
Contact Person: Michael Kummer
  • Office: Old CE Building, Room 222
  • E-mail: kummergtteaching@gmail.com
  • Office Hours: Wednesday, by appointment
    – Usual Time: Wed. 13:45-15:15 Room 222
    – Replacement: Mon. 13:45-15:15 Room 222
  • Course Website: on T-square
    • https://t-square.gatech.edu/portal/site/gtc-eb42-875d-5ba0-82a0-bc4c6e445eac

Course Description:
This course will cover a range of topics in Empirical Industrial Organization, including demand estimation, collusion, introduction of new technology, price discrimination, and consumer search. The emphasis will be on recent empirical papers estimating static models. These models are the foundation of most applied structural work in Marketing, Health, Trade, Environment, and Finance. We will cover both technical details (specification, estimation strategy, identification and economic interpretation) and applications.

In addition to the lecture, an exercise course, which is designed to complement the lecture, will be also offered. In the first classes, we will cover how to use Stata and Matlab/R. Later classes will be devoted to estimate some simple demand models in Stata and Matlab. Subsequently, we will learn two influential methods: Berry, Levinsohn and Pakes (1995) and Pakes, Porter, Ho and Ishii (WP), (or Production function estimation), allocating one or two classes, respectively.
The final block of the course will provide an outlook into selected advanced topics. These topics will be offered for choice to the students as the course progresses and might cover, dynamic equilibrium methods, cartel estimation, spillovers/externality estimation, behavioral aspects or a topic of special interest to students...

Tentative Course Outline

**Core: (Weeks 1-8)**

- Introduction to Empirical Industrial Organization (Week 1)
  - Introduction
  - Stata
- Demand for Differentiated Products (Week 2+3)
- Applications and Improvements of BLP Model (Week 4 and 5)
- Price Discrimination and Marketing (Week 6 and 7)
- Production Function Estimation (Week 7 and 8)

**Extensions (Alternatively):**

- Moment Inequalities and Static Entry/Exit (Week 9 and 10)
  - Bresnahan and Reiss (1991, *Journal of Econometrics*)

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Pakes, Porter, Ho and Ishii (Working Paper)

• Consumer Search and Network Externalities (Week 9 and 10)

• Auctions

• Books:

• Dynamic Aspects:
Additional Literature/Suggestions for Further Study

Survey Papers:


Research Papers


• Hendel, I., and Nevo, A., 2006, Measuring the Implications of Sales and Consumer Inventory Behavior, Econometrica, November 06.


