



Course: Applied Industrial Organization

Faculty: Susanna Esteban

Term: Second semester (second part)

E-mail: susanna.esteban@gmail.com

Web page: not available yet

Office Hours: upon request

Description:

This is a graduate course in Applied Industrial Organization. This course is designed to bridge between theory and empirics. The course will seek to understand how empirical models in the structural IO literature arise naturally from the theoretical literature. With this aim, the course will be structured around frontier topics in Industrial Organization.

Throughout the course, we will follow this structure:

First, we will identify the economic (Industrial Organization) question that we want to answer to then determine which tools are needed to answer it. This will often lead us to follow an ordered sequence. We will start by analyzing the main models in the theoretical literature that have asked the question we want to address (or part of it), covering the models' assumptions and findings. This will be important, as it will allow us to identify the theoretical findings that our empirical model should embody.

Then we will work on developing an empirical model and place special emphasis on highlighting how our empirical model embodies existing theoretical work and findings. We will also address why a structural empirical approach may or may not be necessary.

Lastly, we will discuss the models' computational requirements and their empirical implementation. Among the topics covered, we will include IO topics that bridge between different economics fields and belong to very active research fields.

Objective:

This is a graduate course in Applied Industrial Organization. This course is designed to bridge between theory and empirics. The course will seek to understand how empirical models in the structural IO literature arise naturally from the theoretical literature. With this aim, the course will be structured around frontier topics in Industrial Organization.

Outline:

This outline is tentative and may be revised as we advance with the material. Please see class handouts for a complete and updated list of references.

1. Introduction: Research Questions in Applied Industrial Organization
2. Cost and Production Function
3. Models of Demand: Theory and Empirics
4. Models of Supply and Demand: Theory and Empirics
5. Dynamic Demand and Supply Models
6. Sample Topics:
 - a. Mergers, Product Development and Positioning
 - b. Price Discrimination
 - c. Dynamic Problems: Durability, Storability, Intertemporal Consumption
 - d. Behavioral Models: Applications to Advertising and Product Development

References:

- Jean Tirole, *The Theory of Industrial Organization*, The MIT Press
- Víctor Aguirregabiria's notes (University of Toronto, Department of Economics)
- Matthew Shum, *Econometric Models of Industrial Organization*, World Scientific
- Peter Davis and Eliana Garcés, *Quantitative Techniques for Competition and Antitrust Analysis*, Princeton University Press

Grading:

The problem sets will be project-oriented and will help the student progress towards the elaboration of a research proposal. A final research proposal will be part of the evaluation. If you have any questions, please do not hesitate to contact me at susanna.esteban@gmail.com.

The evaluation will be computed as follows (in brackets, fraction of the final grade):

- Final exam (40%)
- Research proposal (40%)
- Problem sets (15%)
- Participation (5%)