

Empirical Industrial Organization I

Course title – Intitulé du cours	Empirical IO
Level / Semester – Niveau /semestre	Fall 2023
School – Composante	Ecole d'Economie de Toulouse
Teacher – Enseignant responsable	Pierre Dubois and Ana Gazmuri
Other teacher(s) – Autre(s) enseignant(s)	
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Other teacher(s) – Autre(s) enseignant(s)	
Lecture Hours – Volume Horaire CM	30
TA Hours – Volume horaire TD	
TP Hours – Volume horaire TP	
Course Language – Langue du cours	English
TA and/or TP Language – Langue des TD et/ou TP	English

Teaching staff contacts:

- pierre.dubois@tse-fr.eu, T687 (office hours by appointment)
- ana.gazmuri@tse-fr.eu, T683 (office hours by appointment)

Course Objectives: newly acquired knowledge once the course completed should be well identified

This is a course in the Graduate Industrial Organization sequence. The objective of this course is to familiarize students with structural econometric methodologies, including estimation techniques, and applications used at the frontier of the empirical industrial organization literature. The first half aims to give a solid grounding in understanding the structure of markets, and the strategic behavior of firms and their consumers. The second half focuses on advance topics in demand estimation, both in static and dynamic models. At the end of the course, students are expected to know how to interpret the results in an empirical study, how to provide constructive criticism, and how to carry out an empirical research project.

Prerequisites :

Econometrics at the M2 ETE level

Practical information about the sessions:

Students are expected to read one or two papers before the class. The sessions consist of detailed discussion of the papers, their contribution and the methodology. Active participation of the students is required.

Grading system :

First half: Summarizing, criticizing a paper.

Second half: One problem set and a paper presentation

Bibliography/references :

1. Arcidiacono, P (2005), Affirmative Action in Higher Education: How do Admission and Financial Aid Rules Affect Future Earnings? *Econometrica*.
2. Berry, Levinsohn, Pakes (1995), Automobile Prices in Market Equilibrium, *Econometrica*.
3. Berry, Levinsohn, Pakes (2004), Differentiated Products Demand Systems from a Combination of Micro and Macro Data: The New Car Market, *Journal of Political Economy*
4. Bayer, Ferreira, McMillan (2007), A Unified Framework for Measuring Preferences for Schools and Neighborhoods, *Journal of Political Economy*.
5. Gentzkow (2007), Valuing New Goods in a Model with Complementarities: Online Newspapers, *American Economic Review*
6. Gowrisankaran, G., and Rysman (2012), Dynamics of Consumer Demand for New Durable Goods. *Journal of Political Economy*.
7. Hendel I. and A. Nevo (2006), Measuring the Implications of Sales and Consumer Inventory Behavior, *Econometrica*.
8. Hotz, J. and R. Miller (1993), Conditional Choice Probabilities and the Estimation of Dynamic Models, *Review of Economic Studies*.
9. Houde (2012), Spatial Differentiation and Vertical Mergers in Retail Markets for Gasoline, *American Economic Review*.
10. Pakes, A. (1986), Patents as Options: Some Estimates of the Value of Holding European Patent Stocks, *Econometrica*.
11. Rust, J. (1987), Optimal Replacement of GMC Bus Engines: An Empirical Model of Harold Zurcher, *Econometrica*.
12. Rysman, M. (2004), Competition between Networks: A study of the Market for Yellow-Pages, *The Review of Economic Studies*.

Session planning :

First half:

1. Demand and Supply Models of Product Differentiation
2. Measuring Market Power, Welfare and Merger Analysis
3. Vertical Relationships
 - a. Double marginalization
 - b. Nonlinear tariffs
4. Bargaining
5. Advertising

Second half:

1. Advanced Topics in Demand Estimation and Supply Models
 - a. Complementary goods
 - b. Sorting models (endogenous characteristics)
 - c. No prices (alternative allocation mechanisms)
 - d. Imperfect information
 - e. Spatial differentiation
2. Markets with Demand-Side Network Effects; Two-Sided Markets
3. Dynamic Discrete Choice Models

Distance learning :

Distance learning will be provided if necessary, by implementing:

- Online classes
- Recorded lectures (videos) followed by online session for questions.