

Course Title

Course title – Intitulé du cours	Empirical IO III: Advanced topics in demand estimation and supply models. Dynamic Discrete Choice Models.
Level / Semester – Niveau /semestre	Spring 2023
School – Composante	Ecole d'Economie de Toulouse
Teacher – Enseignant responsable	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	15
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:

- email address: ana.gazmuri@tse-fr.eu
- Office number: 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 in the empirical industrial organization literature. The focus of the course is on the empirical methods typically used in industrial organization, specifically regarding demand estimation in both 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.

Grading system :

One problem set and a paper presentation

Class participation is expected.

Bibliography/references :

1. Akerberg (2003), Advertising, Learning, and Consumer Choice in Experience Good Markets: A Structural Empirical Examination. *International Economic Review*
2. Aguirregabiria and Mira (2007), Sequential Estimation of Dynamic Discrete Games. *Econometrica*.
3. Arcidiacono, P (2005), Affirmative Action in Higher Education: How do Admission and Financial Aid Rules Affect Future Earnings? *Econometrica*.
4. Bajari, Benkard and Levin (2007), Estimating Dynamic Models of Imperfect Competition. *Econometrica*
5. Collard-Wexler (2013), Demand Fluctuations and Plant Turnover in the Ready-Mix Concrete Industry. *Econometrica*
6. Crawford and Shum (2005), Uncertainty and Learning in Pharmaceutical Demand. *Econometrica*
7. Erdem, T., S. Imai, and M.P. Keane (2003), Brand and Quantity Choice Dynamics under Price Uncertainty. *Quantitative Marketing and Economics*.
8. Ericson and Pakes (1995), Markov-perfect Industry Dynamics: A framework for empirical work. *The Review of Economic Studies*.
9. Gowrisankaran, G., and J. Stavins (2004), Network Externalities and Technology Adoption: Lessons from Electronic Payments, *The RAND Journal of Economics*.
10. Gowrisankaran, G., and Rysman (2012), Dynamics of Consumer Demand for New Durable Goods. *Journal of Political Economy*.
11. Hendel I. and A. Nevo (2006), Measuring the Implications of Sales and Consumer Inventory Behavior, *Econometrica*.
12. Hotz, J. and R. Miller (1993), Conditional Choice Probabilities and the Estimation of Dynamic Models, *Review of Economic Studies*.
13. Lee, R. S. (2013), Vertical Integration and Exclusivity in Platform and Two-Sided Markets, *American Economic Review*.

14. Pakes, A. (1986), Patents as Options: Some Estimates of the Value of Holding European Patent Stocks, *Econometrica*.
15. Rust, J. (1987), Optimal Replacement of GMC Bus Engines: An Empirical Model of Harold Zurcher, *Econometrica*.
16. Ryan, S.P. (2012), The Costs of Environmental Regulation in a Concentrated Industry (*Econometrica*)
17. Rysman, M. (2004), Competition between Networks: A study of the Market for Yellow-Pages, *The Review of Economic Studies*.
18. Sweeting (2013), Dynamic Product Repositioning in Differentiated Product Industries: The Case of Format Switching in the Commercial Radio Industry. *Econometrica*

Session planning :

Week 1: Advanced Topics in Demand Estimation and Supply Models

Week 2: Markets with Demand-Side Network Effects; Two-Sided Markets

Weeks 3 and 4: Dynamic Discrete Choice Models

Week 5: Dynamic Games

Distance learning :

Distance learning will be provided if necessary, by implementing:

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