



# TITLE

| Course title - Intitulé du cours                  | Empirical Industrial Organization |
|---|-----------------------------------|
| Level / Semester - Niveau /semestre               | Fall 2019                         |
| School - Composante                               |                                   |
| Teacher - Enseignant responsable                  | Ana Gazmuri and Isis Durrmeyer    |
| Other teacher(s) - Autre(s) enseignant(s)         |                                   |
| Lecture Hours - Volume Horaire CM                 | 45                                |
| TA Hours - Volume horaire TD                      | 0                                 |
| TP Hours - Volume horaire TP                      | 0                                 |
| Course Language - Langue du cours                 | English                           |
| TA and/or TP Language - Langue des TD et/ou<br>TP |                                   |

## Teaching staff contacts - Coordonnées de l'équipe pédagogique :

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#### Course's Objectives - Objectifs du cours :

This is a course in the Graduate Industrial Organization sequence. We aim to give a solid grounding in understanding the structure of markets, and the strategic behavior of firms and their consumers. This course focuses on empirical methods and research topics in industrial organization. The objective of this course is to familiarize students with the structural econometric methodologies, including estimation techniques, and applications used in the empirical industrial organization literature. 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.

#### Course outline :

- 1. Demand and Supply Models of Product Differentiation
- 2. Measuring Market Power and Merger Analysis
- 3. Advanced Topics in Differentiated Products Markets
- 4. Markets with Demand-Side Network Effects; Two-Sided Markets
- 5. Static Discrete Games: Entry and Exit
- 6. Dynamic Discrete Choice Models
- 7. Vertical Markets
- 8. Estimation of Productivity and Production Functions

### Prerequisites - Pré requis :

Econometrics at the M2 ETE level

## Grading system - Modalités d'évaluation :

Two problem sets and one in-class presentation

### Bibliography/references - Bibliographie/références :

- 1. Berry, S.T. (1994), Estimating Discrete-Choice Models of Product Differentiation, The RAND Journal of Economics.
- 2. Berry, S.T., J. Levinsohn, and A. Pakes (1995), Automobile Prices in Market Equilibrium, Econometrica.
- 3. Berry, S.T., J. Levinsohn, and A. Pakes (2004), Differentiated Products Demand Systems from a Combination of Micro and Macro Data: The New Vehicle Market, Journal of Political Economy.
- 4. Train (2009), Discrete Choice Methods with Simulation, Cambridge University Press.
- 5. Nevo, A. (2001), Measuring Market Power in the Ready-to-Eat Cereal Industry, Econometrica
- 6. Houde, J.F. (2012), Spatial Differentiation and Vertical Mergers in Retail Markets for Gasoline, American Economic Review.
- 7. Breshnahan, T.F. and P. Reiss (1990), Entry in Monopoly Markets, Review of Economic Studies.
- 8. Bresnahan, T.F. and P.C.Reiss, (1991). Empirical models of discrete games, Journal of Econometrics.
- 9. Berry, S. (1992), Estimation of a Model of Entry in the Airline Industry, Econometrica.
- 10. Seim, K. (2006), An Empirical Model of Firm Entry with Endogenous Product-Type Choices, The RAND Journal of Economics.
- 11. Pakes, A. (1986), Patents as Options: Some Estimates of the Value of Holding European Patent Stocks, Econometrica.
- 12. Rust, J. (1987), Optimal Replacement of GMC Bus Engines: An Empirical Model of Harold Zurcher, Econometrica.
- 13. Hotz, J. and R. Miller (1993), Conditional Choice Probabilities and the Estimation of Dynamic Models, Review of Economic Studies.
- 14. Hendel I. and A. Nevo (2006), Measuring the Implications of Sales and Consumer Inventory Behavior, Econometrica.
- 15. Arcidiacono, P (2005), Affirmative Action in Higher Education: How do Admission and Financial Aid Rules Affect Future Earnings? Econometrica.
- 16. Olley, G. S. and A. Pakes (1996), The Dynamics of Productivity in the Telecommunications Equipment Industry, Econometrica.
- 17. Levinsohn, J. and A. Petrin (2003), Estimating Production Functions Using Inputs to Control for Unobservables, Review of Economic Studies.
- 18. Ackerberg, D., K. Caves, and G. Frazer (2015), Identification properties of recent production function estimators, Econometrica.