

# Master/PhD ...

**Academic Year: 2019-2020**

## **Name of the course:**

Empirical Industrial Organization

## **Professors:**

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## **Informations on the course :**

Master 2 economic analysis/ESSEC Ph.D. 1<sup>st</sup> year

Course load: 27 hours, 9 sessions; 3 hours per session

## **Overview:**

In this course we will cover mainstream empirical industrial organization methods. The main goal is to provide a set of tools necessary to undertake empirical analyses typically performed in Industrial Organization. Most methods that will be reviewed in this course are not limited to empirical IO, but can be used in a variety of different fields (such as health, finance, and environmental economics).

The course will consider reduced form estimation papers, seeking to provide insights from data to understand how markets work. The course will also deal with structural estimation of supply and demand models, search models, and auctions, taking the theoretical models to the data with the objective of generating policy-relevant counterfactuals.

Reduced and structural econometrics methods requires the use of programs such as Python, Stata or Matlab. Practical tutorials will ensure the implementation of the materials provided in the course.

## **Prerequisites**

Microeconomics, Econometrics

## **Course Objectives:**

The objective of the course is to provide the students with an appropriate understanding of key empirical industrial organization models.

- After having attended the classes, the students will:
- have an overview of seminal and recent papers in empirical IO
- understand core empirical methods
- understand the data requirements for each methods to be implemented
- have a working knowledge on Stata, Matlab and Python

## **Evaluation**

Homework assignments: 50%

Final evaluation: 50%

## **Planning / Course o**

1	Monopoly and price discrimination
2	Auction theory
3	Discrete choice random utility models
4	Estimation of demand and marginal costs
5	Estimation of bargaining models
6	Auction econometrics
7	Econometrics of price discrimination

## **Readings**

### **Monopoly and price discrimination.**

Tirols, J. (1988): The theory of industrial organization. MIT Press.

Laffont, J.J., and D. Martimort (2002), The theory of incentives. Princeton University Press.

### **Discrete choice random utility models**

Anderson, S.P., A. de Palma and J. Thisse (1992): Discrete choice models of product differentiation. MIT Press.

### **Auction theory**

Krishna, V. (2009), Auction theory. Academic Press.

### **Estimation of demand and marginal costs**

Steven T. Berry, "Estimating Discrete-Choice Models of Product Differentiation," *Rand Journal of Economics*, 25, 242-262, 1994.

Berry, S., Levinsohn, J., & Pakes, A. (1995). Automobile prices in market equilibrium. *Econometrica: Journal of the Econometric Society*, 841-890.

Nevo, A. (2000). Mergers with differentiated products: The case of the ready-to-eat cereal industry. *The RAND Journal of Economics*, 395-421

Berry, S., & Pakes, A. (2007). The pure characteristics demand model. *International Economic Review*, 48(4), 1193-1225

Goldberg, P. K. (1995). Product differentiation and oligopoly in international markets: The case of the US automobile industry. *Econometrica: Journal of the Econometric Society*, 891-951

Nevo, A. (2011). Empirical models of consumer behavior. *Annu. Rev. Econ.*, 3(1), 51-75.

### **Estimation of bargaining models**

Crawford, Gregory S., and Ali Yurukoglu. 2012. "The Welfare Effects of Bundling in Multichannel Television Markets." *American Economic Review* 102 (2): 643–85.

Dafny, Leemore S. 2010. "Are Health Insurance Markets Competitive?" *American Economic Review* 100 (4): 1399–431

Ho, Katherine, Justin Ho, and Julie Holland Mortimer. 2012. "The Use of Full-Line Forcing Contracts in the Video Rental Industry." *American Economic Review* 102 (2): 686–719.

Horn, Henrik, and Asher Wolinsky. 1988. "Bilateral Monopolies and Incentives for Merger." *RAND Journal of Economics* 19 (3): 408–19.

Grennan, M. (2013). Price discrimination and bargaining: Empirical evidence from medical devices. *American Economic Review*, 103(1), 145-77.

### **Auction econometrics**

Paarsch, Harry J., and Han Hong. "An introduction to the structural econometrics of auction data." MIT Press Books 1 (2006).

Guerre, Emmanuel, Isabelle Perrigne, and Quang Vuong. "Optimal nonparametric estimation of first-price auctions." *Econometrica* 68.3 (2000): 525-574.

Krasnokutskaya, Elena. "Identification and estimation of auction models with unobserved heterogeneity." *The Review of Economic Studies* 78.1 (2011): 293-327.