Ksenia Shakhgildyan Department of Economics Bocconi University

## **Topics in Applied Econometrics:**

# **Empirical Industrial Organization**

## **Course Description**

This is a topics course in Industrial Organization. The goal is to bring students to the frontier of the research literature, with the expectation that they could then perform research in this area independently. The course covers two major areas of IO: demand estimation (Part I) and advanced topics in auction markets (Part II). Both topics are analyzed from both a theoretical and an empirical perspective. Particular emphasis is given to recent empirical methods for the structural analysis of these markets.

### Instructor

Ksenia Shakhgildyan

### **Contact information**

My office is on the 5<sup>th</sup> floor of the Roentgen Building (5-C1-01). You can reach me by email at <u>ksenia.shakhgildyan@unibocconi.it</u>. My office hours are by appointment.

## Grading

Referee reports of two papers	25%
Presentation of one paper	25%
Empirical project	50%

A referee report is a 3-page critical summary of a paper relevant for this class. The presentation lasts 30 minutes and involves one of the papers listed in the reading list. The empirical project entails replicating (part of) the analysis of one paper on auction and of one paper on demand estimation, among those discussed in class.

## **Academic Conduct**

I expect students to collaborate on assignments, such as discussing papers together for referee reports or presentation. However, I expect each assignment to represent substantial independent work by the student. Read the *Bocconi Academic Conduct Code* carefully.

## WEEKLY SCHEDULE (preliminary)

### **PART I: DEMAND ESTIMATION**

Week 1 (1 class): Introduction to Demand Estimation & Demand in Product Space

Week 2: Demand in Characteristics Space: Basics & BLP

Week 3: Demand Estimation: Supply Side, IV Choice and Computational Issues

Week 4: Demand Estimation: Micro moments and Welfare

Week 5: Applications: Marketing, Mergers and Subsidies

Week 6: Models of Suppliers Behavior

Week 7 (Two Alternatives):

Option 1: Estimating Demand with Consumer Level Data / Option 2: Entry Models

### **PART II: AUCTIONS**

Week 8: Review of Auction Theory & Estimation for Single Auctions

Week 9: Single Object under IPV: Entry, Asymmetric Bidders and Unobserved Heterogeneity

Week 10: Collusion in Single Unit Auctions

Week 11: Internet Auctions

Week 12 (One Class): Scoring Rules / Multiple Objectives

Week 13: Simultaneous Dependent Multiunit

Week 14: (Two Alternatives)

Option 1: Multi-object and Combinatorial / Option 2: Sequential

Week 15: (Two Alternatives)

Option1: Moment inequalities and their application / Option 2: Matching markets