



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Advanced Microeconomics

2122-2-F8204B037-F8204B038M

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#### Learning area

Microeconomics

#### Learning objectives

The course objective is twofold. First, it aims to introduce students to the advanced tools of microeconomics, with a specific attention to game theory. Furthermore, it aims to show how to apply these tools to the analysis of market structures, under several strategic and/or informative environments.

#### Contents

The course introduces the main elements of non-cooperative game theory in a setting of complete information (both static and dynamic games). The game theoretical tools are then used to discuss the main models of industrial economics (oligopoly, collusion and product differentiation).

#### Detailed program

? Static games

? Static models of oligopoly

- ? Dynamic games
- ? Dynamic models of oligopoly
- ? Repeated games
- ? Collusion
- ? Horizontal and vertical product differentiation

## **Prerequisites**

Microeconomics M

## **Teaching methods**

The course will be composed by lectures, classes and some team work.

During COVID-19 pandemic, all lessons will be operated remotely with distance learning procedures (simultaneous online transmission in synchronous mode and for some classes also asynchronous). There will be some in-class lessons.

## **Assessment methods**

The exam will verify (i) knowledge of the material (proofs and theoretical models); (ii) analytical ability to apply the material (exercises); (iii) economic intuition and ability to use models to comment on economics cases. Students will be allowed to give an oral presentation of a team work at the end of the course. The performance of the presentation will contribute to the final mark. The team work is not compulsory.

## **Textbooks and Reading Materials**

? Church J. and R. Ware (2000), Industrial Organization. A strategic Approach, first edition, McGraw-Hill. (disponibile gratuitamente, [https://works.bepress.com/jeffrey\\_church/23/](https://works.bepress.com/jeffrey_church/23/))

? Mas-Colell A., M.D. Whinston and J. Green (1995), Microeconomic theory, Oxford University Press.

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