

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# **SYLLABUS DEL CORSO**

## **Advanced Microeconomics**

2425-2-F8204B037-F8204B038M

#### Learning objectives

Learning area Microeconomics

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 (in)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
- · Bayesian Games

## **Prerequisites**

Microeconomics M

The course is not suitable for undergraduate students enrolled in the Erasmus Program.

#### **Teaching methods**

The following teaching methods are adopted:

30 hours of frontal lessons

12 hours of interactive lessons

Part of these lessons (no more than 15% of the total hours) are carried out remotely depending on the lesson timetable for the academic year. 2024-2025

The course will be done in English.

#### **Assessment methods**

The exam is written and it aims at verifying (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**

- 1. Church J. and R. Ware (2000), Industrial Organization. A strategic Approach, first edition, McGraw-Hill. (Available for free: https://works.bepress.com/jeffrey\_church/23/)
- 2. Mas-Colell A., M.D. Whinston and J. Green (1995), Microeconomic theory, Oxford University Press.

#### Semester

First Semester

#### **Teaching language**

**English** 

# **Sustainable Development Goals**

RESPONSIBLE CONSUMPTION AND PRODUCTION