UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Advanced Microeconomics

2627-1-F5603M005-F5603M005-1

Learning objectives

The course is an introduction to advanced microeconomic analysis. Topics will be covered in a rigourous formalised way but with continuous reference to economic intuition and graphic tools.

Students will familiarise with instruments that are the building blocks of economic theory and that they will encounter in future courses.

Knowledge and understanding
By the end of the course, students will be able to describe and explain the core theoretical frameworks of microeconomic theory. Specifically, they will understand the mechanics of choice and demand, including preferences, utility maximization, and income/substitution effects. They will also master the concepts of uncertainty, game theory strategies, production and cost functions, competitive markets (both partial and general equilibrium), and market failures such as monopoly.

Applying knowledge and understanding
Students will be able to apply microeconomic models to solve practical economic problems. They will be capable of calculating utility-maximizing bundles, deriving demand and cost functions, and finding optimal choices under uncertainty. Furthermore, they will be able to compute market equilibria in both competitive and monopolistic structures and evaluate strategies using game theory concepts.

Making judgements
Students will develop the capacity to critically analyze market outcomes and economic policies. They will be able to evaluate the welfare implications of general equilibrium, assess the efficiency of competitive markets, and judge the social costs associated with market failures and monopoly power. They will learn to interpret economic data and theoretical results independently to make informed conclusions.

Communication skills
Students will be able to communicate complex economic concepts, models, and quantitative results clearly and effectively. They will be capable of presenting microeconomic analyses using the appropriate technical lexicon,

graphical representations, and mathematical notation. These arguments can be conveyed successfully to both expert economists and non-specialist audiences.

Learning skills
The course will provide students with the methodological tools and analytical mindset necessary to undertake advanced studies in economics or related fields. They will develop the ability to independently explore academic literature, follow updates in economic theory, and apply self-directed learning methods to solve new and unfamiliar economic problems.

Contents

-Choice and Demand

-Uncertainty and Strategy

-Production and Supply

-Competitive Markets

-Market Failures

Detailed program

1) CHOICE AND DEMAND

- Preferences and Utility
- Utility Maximization and Choice
- Income and Substitution Effects
- Demand Relationships among Goods

2. UNCERTAINTY AND STRATEGY

- Uncertainty
- Game Theory

3. PRODUCTION AND SUPPLY

- Production Functions
- Cost Functions
- Profit Maximization

4. COMPETITIVE MARKETS

- The Partial Equilibrium Competitive Model
- General Equilibrium and Welfare

5. MARKET FAILURE

- Monopoly

Prerequisites

This course in microeconomics relies on graphical analysis, elementary algebra as well as basic calculus. Hence some mathematical prerequisite are needed (references will be provided).
An introductory microeconomics course is useful but not necessary.

Teaching methods

The course consists of 42 lecture hours. Strong interaction between teacher and students is expected. The course also benefits from the application of the relevant concepts through targeted exercises.

Slides of lectures will be posted on the elearning page, as well as tutorials.

Solutions to tutorials will be posted as we solve exercises during classes.
Lectures will be in presence, occasionally some may be streamed and possibil.y recorded. (contact the lecturer in advance if you have troubles attending)

Assessment methods

Written exam. Duration: 1,5 hours.

No midterm exam but an exam will be available during the break in november

Thexam consists of two parts:
1-theory part: students have to concisely answer two out of three questions, a list of possible (but not comprehensive) questions is available on the e-learning page
2-exercises: students have two solve two out of three exercises which will be very similar to hose solved during the course

Textbooks and Reading Materials

Walter Nicholson and Christopher Snyder

Microeconomic Theory: Basic Principles and Extensions, 12th Edition

(Cengage Learning)

Semester

first semester

Teaching language

english

Sustainable Development Goals