

# Doctoral Program in Economics



Academic year 2024/25

## MICROECONOMICS

### Period:

Second term: January and February 2025

### Course hours:

20

### Teachers:

Nicola Dimitri (resp. 12 h), Pietro Battiston (8h),

### Exam methods:

3 hours written examination

### Prerequisites

Basic Microeconomics, Calculus, Basic Statistics

**Production Theory, Expected Utility, General Equilibrium 12h, prof. Dimitri**

### Program

Technology and production function  
Cost function  
Profit function  
Duality  
Preferences under uncertainty  
Expected utility  
Walrasian Equilibrium  
Arrow-Debreu Equilibrium

### Educational objectives

In this module the students will learn the fundamentals of neoclassical production theory, expected utility and general equilibrium at an advanced level

### Bibliographical references

Much of the material will refer to:

Jehel & Reny (2001) *Advanced Microeconomic Theory* (2<sup>nd</sup> ed.) Addison Wesley.  
Mass-Colell, Whinston & Green (1995) *Microeconomic Theory*, Oxford University Press  
Munoz-Garcia (2017) *Advanced Microeconomic Theory*, MIT Press  
Varian (1992) *Microeconomic Analysis* (3<sup>rd</sup> ed) Norton

In case, additional references will be provided by the lecturer

## Consumption Theory, 8h, prof. Battiston

### Program

- Preferences
- Utility Function
- Expenditure Function
- Demand function
- Duality of Marshallian and Hicksian demand function
- Slutsky Equation

### Educational objectives

In this module the students will learn the fundamentals of neoclassical consumption theory at an advanced level

### Bibliographical references

Much of the material will refer to:

Mass-Colell, Whinston & Green (1995) *Microeconomic Theory*, Oxford University Press

Jehel & Reny (2011) *Advanced Microeconomic Theory* (3<sup>rd</sup> ed.) Prentice Hall.

Varian (1992) *Microeconomic Analysis* (3<sup>rd</sup> ed) Norton

In case, additional references will be provided by the lecturer