

Topics in Economic Theory III

2022-2023 Academic Year
Master of Research in Economics, Finance and Management

1. Description of the subject

- Topics in Economic Theory III
 - Total credits: 3 ECTS
 - Type of subject: Optative
 - Department of Economics and Business
 - Teaching team: Antonio Penta
- Code: 32076
Workload: 75 hours
Term: 2nd

2. Teaching guide

Introduction and Teaching methodology:

This course will focus on topics in game theory, particularly concerning issues of *incomplete information, robustness, mechanism design, and implementation*. The course will combine classic topics in these areas with more recent work (published or not) at the frontier of the research in these areas.

The format of the course will be a mix of frontal lectures, discussion sessions, and student presentations.

The course is targeted towards MRes and PhD students with an interest in game theory, and it assumes familiarity with the concepts studied throughout the Advanced Microeconomics Sequence (Adv. Micro. I-III).

Objectives:

The objective of the course is to provide a solid background to understand some of the main active research areas in game theory, as well as to cover some important classic notions which could not be covered in the Advanced Microeconomics sequence. The course also aims to enhance critical skills for research activity, such as independent studying, critical thinking, presentations, etc.

Evaluation:

Students' evaluation will be based either on (i) a research project, or on (ii) a combination of class participation, presentations, and refereeing assignments.

Contents:

The course will combine classic topics in these areas (such as equilibrium and non-equilibrium concepts for Bayesian games, belief hierarchies, optimal auctions, surplus extraction, etc.), with more recent work at the frontier of the research in these areas (e.g., robust solution concepts, robust mechanism design, non-EU approaches, etc.). The exact topics which will be covered, the time allocated to them, as well as the time allocated to the different kinds of teaching activities, will largely be determined as we progress, based on the interaction with the class.