Universitat Pompeu Fabra Barcelona

Academic Year: 2025/26

21235 - Topics in Applied Economics

Teaching Guide Information

Academic Course: 2025/26

Academic Center: 304 - Faculty of Law and Economics
332 - Faculty of Economic and Business Sciences

Study: 3327 - Bachelor's degree in International Business Economics

Subject: 21235 - Topics in Applied Economics

Credits: 5.0

Course: 3 and 4

Teaching languages:

Theory: Group 1: English

Seminar: Group 101: Pending

Teachers: Larbi Alaoui-Soce el Alami, José Javier Apesteguia Garces

Teaching Period: First term

Presentation

This class aims to teach the **principles of theory of choice**, which is a fundamental part of modern economic theory and its applications. We will also present important topics in **behavioral economics** and **decision theory**, in which the economics approach is extended and adapted to allow for notions of temptation and self-control problems, social preferences, reference dependence, motivated beliefs, attention limitations, and regret aversion.

The approach of the course will be **fundamentally theoretical**, emphasizing the **axiomatic foundations** of the different theories of choice we will cover in class. Students are expected to have a strong microeconomic theory background. We will also cover at some length **applications of the choice theories** presented in this class to a variety of relevant settings, such as savings, medical decision-making, social media usage and the like.

Associated skills | General learning outcomes

The course will be divided into 4 parts. Each part will consist first of the standard approach, and secondly of potential departures from it, as well as applications of the approaches considered.

In part 1 of the course, we will start with the classical theory of choice by first describing

in detail the setting, the preferences of the ‘rational’ agent, the representation of the agent’s preferences as utility functions, and finally the behavior of the agent. We will then consider boundedly rational decision-making. In particular, we will consider systematic deviations from rationality (that is, sequential rationalizability and limited attention), and discuss how these models of bounded rationality can be applied to real-world settings. Lastly, we will consider stochastic-choice, in which an agent makes different decisions even when faced with the same identical problem, and how this can be thought of and analyzed. We will briefly discuss how this approach can be connected to other fields, such as neuroscience.

In part 2 of the course, we will study decision making under risk and uncertainty, again using the classical approach, while discussing the difference between objective and subjective beliefs, and how these matter. We will then consider again departures from the standard ‘expected utility’ approach, namely accounting for reference-dependence, ambiguity aversion, disappointment and regret. Here too, we will discuss applications of these models.

In part 3, we discuss decision-making in contexts with time, specifically the standard exponential time discounting model. We will then analyze models of behavior in the face of self-control problems, such as hyperbolic discounting. We will also consider applications of these approaches to various settings (e.g. savings decisions and development economics, among others). We will also consider preferences for the timing of resolution of uncertainty (sooner compared to later), motivated beliefs (wanting to believe something or another), and how these can be applied to various settings (e.g. with respect to medical testing, self-handicapping, green-washing and climate change, and political economics).

In part 4, we will analyze social preferences (e.g. fairness, altruism and reciprocity) , and discuss which of these forms of preferences can be viewed from within the standard approach and which are rather departures from it.

Contents

The four parts of the course, which correspond roughly to 5 lectures each, will be divided as follows.
Part 1: Decision-making under certainty (6 lectures)
Part 2: Decision-making under uncertainty (5 lectures)
Part 3: Time preferences, self-control, and motivated beliefs (5 lectures)
Part 4: Social preferences (4 lectures)

Evaluation and grading system

The course will be evaluated as follows: participation in class counts for 25%, problem sets for 15%, and the final exam for 60%. There will be no midterm.

Students who have a final grade below 5 will have a second chance to pass the course by taking the retake exam. The final grade after the retake exam will be calculated as previously, but using the retake exam grade instead of the original final exam grade.