Syllabus

Course Description

Course Title	Behavioral and Experimental Economics
Course Code	29126
Course Title Additional	
Scientific-Disciplinary Sector	NN
Language	English
Degree Course	PhD Programme in Economics and Finance
Other Degree Courses (Loaned)	
Lecturers	
Teaching Assistant	
Semester	First semester
Course Year/s	2026/27
CP	2
Teaching Hours	14
Lab Hours	0
Individual Study Hours	0
Planned Office Hours	
Contents Summary	The course introduces students to the foundations and applications of behavioral and experimental economics. It examines how psychological factors influence economic decision-making and highlights the differences between standard and behavioral approaches to economics. Key topics include bounded rationality, decision-making under risk and uncertainty, subjective probability, expected value, risk perception, ambiguity, and the limits of probabilistic reasoning. The course also introduces the principles and methods of experimental economics, focusing on how experiments can be used to identify causal relationships and study economic behavior. Students explore laboratory, field, and natural experiments, as well as issues related to validity, measurement, and reliability. Particular

	attention is given to social preferences such as altruism, fairness, reciprocity, and inequality aversion through the analysis of classic experimental games. In addition, the course includes project-oriented activities in which students develop behavioral hypotheses, design experimental procedures, and discuss implementation and analysis strategies for their research projects.
Course Topics	Module A - Behavioral Economics, Prof. Luigi Mittone (7 hours) • Introduction to behavioral economics (2 hours): origins and development of behavioral economics; standard economics versus behavioral economics; rationality, consequentialism, and individualism; bounded rationality; psychological foundations of economic behavior; cognitive and mainstream behavioral economics. • Decision-making under risk and uncertainty (3 hours): risk versus uncertainty; objective and subjective probability; Keynes, de Finetti, and Bayesian approaches; lotteries and probabilistic outcomes; expected value and decision-making; statistical and psychological measures of risk; risk perception; ambiguity and the Ellsberg paradox; strategic and fundamental uncertainty; limits of probabilistic reasoning. • Project discussion (2 hours): discussion of students' project ideas from a behavioral-economics perspective; development of behavioral hypotheses; feedback on the behavioral mechanisms, decision tasks, and research questions to be embedded in the group projects. Module B - Experimental Economics, Prof. Matteo Ploner (7 hours) • Experimental methods (3 hours): correlation versus causation; why experiments; randomization for causal identification; natural, field, and laboratory experiments; the role of experiments in economics; controlled variation; internal and external validity; measurement and reliability. • Social preferences: theory and lab (2 hours): from self-interest to other-regarding preferences; altruism, fairness, reciprocity, inequality aversion, and efficiency concerns; experimental evidence from dictator, ultimatum, public goods, and trust games; design choices concerning incentives, anonymity, framing, and belief elicitation; outcome-based and belief-based models of social

	preferences. • Experimental project discussion and implementation (2 hours): discussion of students' experimental designs; implementation requirements for oTree; translation of the project into classroom procedures; quick data collection and discussion of possible analysis strategies, time permitting.
Keywords	
Recommended Prerequisites	Basic knowledge of microeconomics and elementary probability theory is recommended. Prior knowledge of experimental methods is useful but not required.
Propaedeutic Courses	
Teaching Format	Lectures, guided discussion of classic and contemporary studies, classroom exercises, experimental demonstrations, lab-oriented discussion, and supervised development of a group experimental project. The course combines conceptual material with practical design work so that students can connect behavioral research questions with implementable experimental protocols.
Mandatory Attendance	Required
Specific Educational Objectives and Learning Outcomes	PhD programme: The courses aim to train researchers with strong quantitative and theoretical skills, capable of analyzing economic and financial phenomena. Candidates' dissertations are expected to adhere to the highest standards of scientific rigor and to demonstrate innovative features that make them suitable for publication in leading international peer-reviewed journals. The programme therefore seeks to contribute to the international scientific debate in economics and finance. To this end, candidates will be encouraged to employ state-of-the-art methodologies and to adopt a multidisciplinary approach. The advanced training provided by the programme, together with the research methods required to complete the dissertation, prepares candidates both for an academic career and for high-level professional positions involving policy analysis and policymaking. Course learning outcomes:

	By the end of the course, students will be able to: • Compare standard and behavioral approaches to economic decision-making. • Explain bounded rationality and key behavioral regularities under risk and uncertainty. • Interpret behavioral and experimental evidence on risk, ambiguity, and social preferences. • Distinguish correlation from causation and assess the role of randomization in economic experiments. • Evaluate the internal and external validity of experimental designs. • Design a concise economic experiment with clear hypotheses, treatments, incentives, procedures, and an analysis plan. • Prepare experimental instructions and implementation details sufficiently precise for classroom implementation by the instructor.
Specific Educational Objectives and Learning Outcomes (additional info.)	The course introduces students to the behavioral and experimental foundations of contemporary economic analysis. The first module focuses on behavioral economics and examines how psychological regularities, bounded rationality, and departures from standard rational-choice assumptions affect economic decision-making, with special attention to risk and uncertainty. The second module focuses on experimental economics and provides the methodological tools needed to design, evaluate, and implement controlled economic experiments. Together, the two modules guide students from behavioral hypotheses to implementable experimental designs.
Assessment	Assessment is based on a group project. Students develop, in groups, a complete experimental project to be implemented by the instructor in the classroom, time permitting. Students are not required to code the experiment themselves, but the project must contain all information needed for implementation. The project report should include: 1. Motivation and research question, with a concise behavioral or experimental-economics rationale. 2. Experimental design, including task or game, treatments, timing, information structure, matching protocol, incentives, and payoff rules. 3. Procedures and implementation details, including the sequence of stages or screens, randomization, feedback, and

	payment rules. 4. Expected results and analysis plan, including main outcome variables and planned comparisons or tests. 5. Draft participant instructions suitable for direct use, or minor editing, in class.
Evaluation Criteria	The project will be evaluated on the clarity and relevance of the research question; integration of behavioral and experimental reasoning; coherence and feasibility of the experimental design; precision of treatments, incentives, procedures, and instructions; implementability in the classroom; quality of the expected-results and analysis plan; and the quality of the project discussion.
Required Readings	Lecture materials and selected articles or chapters made available by the instructor
Supplementary Readings	Camerer, C. F. (2003). *Behavioral Game Theory*. Princeton University Press. Kahneman, D. (2011). *Thinking, Fast and Slow*. Farrar, Straus and Giroux. Thaler, R. H. (2015). *Misbehaving: The Making of Behavioral Economics*. W. W. Norton. Slovic, P. (2000). *The Perception of Risk*. Earthscan. Selected journal articles on experimental methodology, social preferences, risk, ambiguity, and experimental implementation will be suggested during the course
Further Information	The course is organised in two complementary modules: Behavioral Economics, taught by Prof. Luigi Mittone (7 hours), and Experimental Economics, taught by Prof. Matteo Ploner (7 hours).
Sustainable Development Goals (SDGs)	