

Experimental Economics

Second Semester 2024-2025

Professor:Frieder NeunhoefferE-mail:neunhoeffer@iseg.ulisboa.ptWebpage:https://frieder-neunhoeffer.comClass meetings:12pm-1:30pm, Tue (F1 008) & Thu (Computer Room F2 201)Office hours:by appointment

Course website: on Fenix

Overview

Experimental Economics is one of the fastest growing fields in economics today. The field is based on the idea that economics is not only a theoretical and observational science, but also an experimental one. Economic experiments are important for testing economic theories, get new insights for building new economic ideas and models, and to inform public policy debate. This happens in all fields of economics including Microeconomics, Game Theory, Behavioral Economics, Industrial Economics, Public Finance, Labor economics, Trade, Development Economics, and nowadays even in Macroeconomics.

For those students planning to work in the field of economics, or related fields, such as business, finance, law, or politics, the use of experiments is becoming increasingly important. For instance, many big companies, like Amazon, Facebook, Uber, Deloitte, as well as governments, and European Union organizations (EU Policy lab) are now conducting experiments. For those planning to continue their graduate studies, this course will introduce high skills and expose students to new knowledge discovery.

In this course you will be introduced to the exciting research frontiers and methods in experimental economics and its most recent applications. First, you will be introduced to the methodology of experimental research in economics and learn about the variety of experiments, form the lab to the field. You will get the right skills to think about, design, and conduct an experiment. Also, you will learn how to analyze experimental economic data. In particular, you will have the chance to understand how experiments can be used to solve many of the identification problems present in non-experimental data.

Second, we will conduct various laboratory experiments using open source experimental software. In the experiments conducted in class, students will be the participants as well as the scientific analysts who will understand and explain the results. The experiments will cover different economic topics. For example, we will conduct an experimental market with price controls, a market where sellers attempt to conspire to fix prices, a public goods experiment, a bargaining experiment, and learn how to elicit individual preferences in the lab, such as risk preferences.

Main Course Goals

- Learn how individuals actually behave and make choices in economic situations using the methodology of experimental economics
- Compare observed behavior with the behavior assumed in standard economic theory
- Discuss how predictions of economic theory can be improved when experimental evidence is considered
- Learn how to design and conduct an experiment in economics
- Learn how to analyze experimental data

READINGS (NOT COMPULSORY)

BOOKS:

Davis, Douglas and Holt, Charles (2021). <u>Experimental Economics</u>. Princeton University Press.

Kagel, John and Roth, Alvin (2020). <u>The Handbook of Experimental Economics</u>. Princeton University Press.

Journal papers:

List, J., Sadoff, S., and Wagner, M. (2011). <u>So you want to run an experiment, now what? Some simple</u> rules of thumb for optimal experimental design. Experimental Economics.

Web Resources

Class announcements and additional readings will be posted on *Fenix*. Make sure you check the course website regularly for updated information about the course. However, there may be occasions where announcements will be made in class and not posted on the website.

Grading

Lab Reports	35%
Group Experiment	20%
Attendance to classes and experiments + active class participation	10%
Final Exam (Regular period or Resit period)	35%

Course Requirements and Policies

Lab Reports: Lab Reports should be done collaboratively in groups of <u>4 students</u>. Lab reports are due in print until Tuesday at 12PM (Lisbon time) in class and may not be turned in later. Lab Reports should not be handed in by email. The experimental data, in Excel format, for your Lab Reports will be posted on Fenix.

Group Experiment: Same group of <u>4 students</u> doing the Lab Reports. Part of this course's purpose is to allow you to learn about scientific methodologies. Therefore, each group will design their own experiment to test a specific research question. Each group will present their research question and experimental design in a 15-minute class presentation during the last week.

Credit from attendance to classes and experiments and class participation:

Attendance and active participation in class are expected. More than answering to questions correctly, you are expected to participate in class discussions and be fully attentive – using a laptop or smartphone during class is detrimental to your own and your classmates' learning progress and also disrespectful to the instructor.

Given the above, you will be asked to sign an attendance sheet in every class.

If you are sick and cannot attend class you are expected to hand in a **doctor's official note documenting your illness**.

Final Exam: The final exam, either in the '*Regular period*' or in the '*Resit period*', will cover all the course material.

Grief Absence Policy

Students will be excused for funeral leave and given the opportunity to earn equivalent credit and to demonstrate evidence of meeting the learning outcomes for missed assignments or assessments in the event of the death of a member of the student's family.

Students with disabilities

If you have a disability that requires special accommodation, please make an appointment to speak with me in order to discuss any adjustments.

Academic dishonesty and the course code of honor

The acts of cheating, lying, and deceit in any of their diverse forms (such as the use of substitutes for taking examinations, the use of illegal cribs, plagiarism, and copying during examinations) is dishonest and is not tolerated. Moreover, knowingly to aid and abet, directly or indirectly, other parties in committing dishonest acts is in itself dishonest.

To foster a climate of trust and high standards of academic achievement, the Professor is committed to cultivating academic integrity and expects students to exhibit the highest standards of honor in their scholastic endeavors. As members of the academic community, our foremost interest is toward achieving noble educational goals and our foremost responsibility is to ensure that academic honesty prevails.

Use of copyrighted materials

Among the materials that may be protected by copyright law are the lectures, notes, and other material presented in class or as part of the course. The materials presented are protected by copyright. Students enrolled in this course are permitted to take notes and have access to the slides which they may use for individual/group study or for other non-commercial purposes reasonably arising from enrollment in the course or the University generally.

Campus Emergencies

In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances beyond the instructor's control.

COURSE OUTLINE AND SCHEDULE

	28-Jan	TUE	Welcome + Syllabus: Overview, goals, program, grading,	
Week 1	20-5411	TOL	Economics as an experimental discipline	
	30-Jan	THU		
			Experimental Economics vs Behavioral Economics	
			Brief history of Experimental Economics	
Week 2			The purpose and paradigms of Economic Experiments	
	4-Feb	TUE	Fundamental design elements	
			Measurement methods	
	6-Feb	THU	LAB EXP #1 [This class meets in a computer room]	
Week 3	11-Feb	THE	The Double Auction Market: Excise Taxes and Price Controls	
		TUE	LAB REPORT 1 DUE	
	13-Feb	THU	LAB EXP #2 [This class meets in a computer room]	
Week 4	18-Feb		Asymmetric Quality Information: A Market for Lemons	
		TUE	LAB REPORT 2 DUE	
	20-Feb	THU	LAB EXP #3 [This class meets in a computer room]	
			Cournot market	
Week 5	25-Feb	TUE	LAB REPORT 3 DUE	
WEEK J	27.5.4	T 1111		
	27-Feb	THU	LAB EXP #4 [This class meets in a computer room]	
Week 6	6-Mar	THU	Revision of Game Theory. Trust Game.	
			LAB REPORT 4 DUE	
Week 7	11-Mar	TUE	IN-CLASS WORKING ON GROUP EXPERIMENTAL DESIGN PROJECT	
	13-Mar	тни	LAB EXP #5 [This class meets in a computer room]	
Week 8	18-Mar	TUE	Reciprocity Game.	
			LAB REPORT 5 DUE	
	20-Mar	THU	LAB EXP #6 [This class meets in a computer room]	
Week 9	25-Mar		T 115	Volunteer Dilemma.
		TUE	LAB REPORT 6 DUE	
	27-Mar	THU	LAB EXP #7 [This class meets in a computer room]	
Week 10	1-Apr	TUE	Provision of Public Goods Through Voluntary Contributions	
			LAB REPORT 7 DUE	
	3-Apr	THU		
			IN-CLASS WORKING ON GROUP EXPERIMENTAL DESIGN PROJECT	
Week 11	8-Apr	TUE	Selective attention and memory	
	10-Apr	THU	Selective attention and memory (cont.)	
	22-Apr	TUE	Nudging: Field and survey experiments.	
Week 12				
	24-Apr	THU	Students presentations	
Week 13	29-Apr	TUE	Students presentations	