Experimental Methods in Economics and Business

Course leader: Vittorio Pelligra (UniCa)

Other instructors:

Andrea Isoni (UniCa & Warwick University)

Federico Atzori (UniMiB)

Gabriele Ballicu (UniCa)

Aims of the course

The course is a short introduction (12 hrs.) to the behavioral and experimental approach to the study of economic behavior and institutions. Experiments are now an established method of investigation in economics ("experimental economics") and the experimental method is now widely considered as a tool among others in the typical economist's toolbox. Its use has shed light on many areas, on the theoretical side (decision theory, game theory, markets) as on the more applied ones (policy, development, labor economics, industrial organization, health economics, etc.). The purpose of this course is to provide students with the methodological skills required to understand the design and the results of economic experiments and to introduce the basics on how to conduct experiments in their own research.

Learning outcomes and competences

Upon successful completion of this course, students will be able to:

- Think in an interdisciplinary way. Behavioral Economics combines knowledge from several disciplines, such as Economics, Psychology, Sociology and Neuroscience. Students will learn how to formalize the concepts from social sciences outside Economics (e.g., fairness, reciprocity, trust, envy etc.) and how to incorporate them into economic models.

- Understand the logic of various types of experiments (lab, field, natural, etc.) and learn how to use experiments to test theoretical ideas.
- Think critically with respect to the results of economic research.

Pre-requisites

Knowledge of major topics in microeconomics (preference and choice, consumer choice, choice under uncertainty) and basic knowledge of game theory is required to take the course profitably.

Course contents and syllabus

Lecture 1 Vittorio Pelligra 27/03/2026 h. 10-13 Lab SEA (3 hours)	**Part I: Introduction and Methodology** • Historical developments • Correlation and causality • Difference between psychology and economics • Homo Economicus • WEIRD subjects **Part II: How to design and conduct an experiment** • Hypotheses, Design and Procedures • Experimental subjects • Incentives • Controls • Data analysis
Lecture 2 Andrea Isoni 30/03/2026 h. 14-16 Lab SEA (2 hours)	**Part III: Experimental tests of decision theory** • Introduction to Expected Utility Theory • The Common Ratio Effect, the Common Consequence Effect, and the Preference Reversal phenomenon • Practical issues in designing risky-choice experiments
Lecture 3 Andrea Isoni 08/04/2026 h. 14-16 Lab SEA (2 hours)	**Part IV: Experiments on Coordination and Focal Points** • Coordination problems • Salient labels and focal points • Tacit bargaining • Matching vs. bargaining • De-emphasising payoff information • Conflict of interest vs. payoff inequality • Player labels vs. strategy labels • Explicit bargaining • Emergence of salience
Lecture 4 Gabriele Ballicu 14/04/2026 h. 14-16 Lab SEA (2 hours)	**Part V: Nudging and Experiments in Behavioural Change** • The concept of Nudging • Examples of Nudges • Nudges and Sludges • Nudging in the real world: and practical challenges in conducting Randomised Control Trials • Nudging in the lab: understanding when and how nudges work (practical challenges in finding reliable nudges to test new hypotheses) • Replication and pre-registration

Lecture 5
Federico Atzori
Vittorio Pelligra
 	
21/04/2026
h. 10-13 Lab SEA
(3 hours)
	Part VI: Lab Experience
	• Hands-on laboratory experience on the most important games for measuring social and other-regarding preferences.
	
	Part VI: Social Preferences and Cooperation
	• The evidence of human sociality
	• Dictator Game and Ultimatum games
	• Gift exchange and trust games
	  ○ Trust and trustworthiness
	• Public Good games
	  ○ Voluntary contribution in the Public Good Game
	  ○ Antisocial punishment

Organization of the course

The course consists of 12 hours of lectures scheduled in 9 hours of class-room lecturers and 3 hours of laboratory experience.

The relevant materials can be found in the *Teams class* "PhD Programme in Economics and Business" following this path: Documenti/General/Class Materials/Experimental Methods First year PhD students are made members by using their UniCa email account. Students can access the *Teams* application by using the same account.

Materials will be made available after each class.

The timetable of the course can be found in the Team class calendar.

Assessment method

Students are required to write an essay (about 2500 words) on a selected topic agreed with the teachers.

Reading list (suggested)

Part I

- Falk, A. and Heckman, J. (2009): Lab Experiments Are a Major Source of Knowledge in the Social Sciences. *Science* 326 (5952): 535-8.
- Croson, Rachel and Simon Ga5chter (2010): The Science of Experimental Economics. *Journal of Economic Behavior and Organization* 73(1): 122-31.
- Thaler, Richard H. 2000. "From Homo Economicus to Homo Sapiens." *Journal of Economic Perspectives* 14: 133-141.
- Hertwig, R., & Ortmann, a. (2001). Experimental practices in economics: a methodological challenge for psychologists? The Behavioral and Brain Sciences, 24(3), 383–403
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). "The weirdest people in the world?". *Behavioral and brain sciences*, 33(2-3), 61- 83.
- Symposium on 'Experimental economics' in Economic Journal, 1999, F1-F45, containing papers by C. Starmer ('Experimental economics: hard science or wasteful tinkering?'), K. Binmore ('Why experiment in economics?'), G. Loewenstein ('Experimental economics from the viewpoint of behavioural economics') and G. Loomes ('Some lessons from past experiments and some challenges for the future').

Part II.

- Jacquemet, N., L'Haridon, O., (2018). *Experimental Economics: Method and Applications.* Cambridge University Press.

Part III.

- Machina, M (1987). Choice under Uncertainty: Problems Solved and Unsolved. *Journal of Economic Perspectives* 1(1): 121–154.
- Seidl, C. (2002). Preference Reversal. *Journal of Economic Surveys* 16(5): 621–655.
- Starmer, C. and Sugden, R. (1991). Does the Random Lottery Incentive System Elicit True Preferences? An Experimental Investigation. *American Economic Review* 81(4): 971–978.

Part IV.

- Crawford, V.P., U. Gneezy and Y. Rottenstreich (2008), 'The power of focal points is limited: even minute payoff asymmetry may yield large coordination failures', *American Economic Review*, 98, 1443–1458.
- Isoni, A., A. Poulsen, R. Sugden and K. Tsutsui (2013), 'Focal points in tacit bargaining games: experimental evidence', *European Economic Review*, 59, 167–188.

- Isoni, A., A. Poulsen, R. Sugden and K. Tsutsui (2014), 'Efficiency, equality and labelling: An experimental investigation of focal points in explicit bargaining', *American Economic Review*, 104, 3256– 3287.
- Isoni, A., A. Poulsen, R. Sugden and K. Tsutsui (2019), 'Focal points and payoff information in tacit bargaining', *Games and Economic Behavior*, 114, 193–214.
- Isoni, A., R. Sugden and J. Zheng (2020), 'The pizza night game: Efficiency, conflict and inequality in tacit bargaining games with focal points', *European Economic Review*, 127, 103428.
- Isoni, A., Sugden, R. and J. Zheng (2022). Focal Points in Experimental Bargaining Games. In: Karagözoğlu, E., Hyndman, K.B. (eds) Bargaining. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-76666-5_6.
- Mehta, J., C. Starmer and R. Sugden (1994), 'The nature of salience: an experimental investigation of pure coordination games', *American Economic Review*, 84, 658–673.
- Schelling, T.C. (1960), *The Strategy of Conflict*, Cambridge, MA: Harvard University Press.

Part V.

- Thaler, R. H. and Sunstein, C. (2003). Libertarian Paternalism. *American Economic Review Papers and Proceedings* 93(2): 175–179.
- Johnson, E. J. and Goldstein, D. (2003). Do Defaults Save Lives? *Science* 302: 1338–1339.
- Sunstein, C. R. (2022). Sludge audits. *Behavioural Public Policy*, *6*(4), 654-673.
- Mazar, N., Amir, O. and Ariely, D. (2008). The Dishonesty of Honest People: A Theory of Self-Concept Maintenance. *Journal of Marketing Research* 45: 633–644.
- BIT report
- Verschuere, B., Meijer, E. H., Jim, A., McCarthy, R., Hoogesteyn, K., Skowronski, J., Orthey, R., Acar, O. A., …, Isoni, A., …, Yıldız, E. (2018). "Registered Replication Report: Mazar, N., Amir, O., & Ariely, D. (2008)". *Advances in Methods and Practices in Psychological Science*: 1(3) 299–317.

Part VI.

- Güth, W., Schmittberger, R., & Schwarze, B. (1982). An experimental analysis of ultimatum bargaining. *Journal of economic behavior & organization*, *3*(4), 367-388.
- Güth, W., & Kocher, M. G. (2014). More than thirty years of ultimatum bargaining experiments: Motives, variations, and a survey of the recent literature. *Journal of Economic Behavior & Organization*, *108*, 396-409.
- Forsythe, R., Horowitz, J. L., Savin, N. E., & Sefton, M. (1994). Fairness in simple bargaining experiments. *Games and Economic behavior*, *6*(3), 347-369.
- Akerlof, G. A. (1984). Gift exchange and efficiency-wage theory: Four views. *The American Economic Review*, *74*(2), 79-83.

- Fehr, E., Kirchsteiger, G., & Riedl, A. (1993). Does fairness prevent market clearing? An experimental investigation. *The quarterly journal of economics*, *108*(2), 437-459.
- Zelmer, J. (2003). Linear public goods experiments: A meta-analysis. *Experimental Economics*, *6*, 299-310
- Berg, J., Dickhaut, J., & McCabe, K. (1995). Trust, reciprocity, and social history. *Games and economic behavior*, *10*(1), 122-142.