

Course Syllabus**GRAD-E1399: Experiments for Economics and Policy Design**Area of Concentration: *Policy Analysis***1. General information**

Course Format	Onsite
Instructor(s)	Prof. Egon Tripodi
Instructor's e-mail	tripodi@hertie-school.org
Assistant	Ayamba Kwoyila (kwoyila@hertie-school.org)
Instructor's Office Hours	To schedule office hours with Egon Tripodi: calendly.com/egontripodi/oh

Link to [Study, Examination and Admission Rules and MIA, MDS and MPP Module Handbooks](#)For information on **course times, session dates and course locations** please consult the [Course List](#) on *MyStudies*.Instructor Information:

Egon Tripodi is Assistant Professor of Economics at the Hertie School. Egon is an applied microeconomist, broadly interested in Behavioral, Public and Political Economy questions. His research uses lab, field and natural experiments to understand how incentives and the social environment shape behavior and beliefs. Before joining the Hertie School, Egon was a JILAEE Postdoctoral Research Fellow between the University of Chicago and the Universidad del CEMA in Buenos Aires, and an Assistant Professor of Economics at the University of Essex. He earned a PhD in Economics from the European University Institute in 2020, and holds a BS in Finance and an MSc in Economics from the University of Rome, Tor Vergata.

2. Course Contents and Learning ObjectivesCourse contents:

Experiments have become a very popular method to address questions that are difficult to answer with observational data. They can be used in abstract settings to further our basic understanding of individual choice behavior (e.g. choice under risk, charitable giving, inter-temporal preferences), or behavior in strategic settings (e.g. market games, cooperation games, coordination games). At the same time, researchers increasingly work with governments, firms and NGOs to conduct experiments in the wild. The capacity to ask important causal questions in settings that are immediately relevant to the issue at hand has already made experiments popular also outside of academia, especially for policy design and day-to-day decision making in big firms.

In this course, we will study experiments from the perspective of academic economists conducting research with firms and organizations. We will critically evaluate the promises and challenges of the experimental method for generating knowledge about human behavior and supporting policy

decisions. We will discuss research as well as opinion articles on: the role of experiments in causal inference, the ethics of experimentation, how experiments address the empirical problems of internal and external validity, the methodology of designing and conducting experiments, the challenges of going from proof-of-concept studies to policies (th)at scale.

Main learning objectives:

This course will introduce students to core debates that concern the methodology of running social science experiments, will give students the tools to assess the merits of an experimental design and to design their own experiment. Students will exercise and develop their critical skills on the use of evidence-based policy making through experiments.

Target group:

2nd year MPP, MIA and MDS students, as well as PhD students (both at an early stage, as an introduction to experimental methods, and more advanced, for mentoring on experimental design and grant application).

Prerequisites:

A solid understanding of statistics and microeconomics is an advantage.

Diversity Statement:

Understanding and respect for all cultures and ethnicities is central to the teaching at Hertie. Being mindful of diversity is an important issue for policy professionals in the planning, implementation, and evaluation of programmes designed for specific groups, populations, or communities. Diversity and cultural awareness will be integrated in the course content whenever possible.

3. Grading and Assignments

Composition of Final Grade for Master’s students:

Assignment 1: Oral presentation	Deadline: 1 day before the presentation is scheduled	Submit the slides via Moodle	45%
Assignment 2: 5-page grant application	Deadline: 19.00h Berlin time, December 13	Submit via Moodle	45%
Participation grade			10%

Composition of Final Grade for PhD students:

Assignment 1: Oral presentation	Deadline: 1 day before the presentation is scheduled	Submit the slides via email to Egon	25%
Assignment 2: 5-page grant application	Deadline: 19.00h Berlin time, December 13	Submit via email to Egon	45%
Assignment 3: 2-page referee report	Deadline: 19.00h Berlin time, November 29	Submit via email to Egon	20%
Participation grade			10%

Assignment Details

Assignment 1

Students will choose a topic for presentation from the 18 listed in the Session Overview. Each presentation covers 1-2 academic articles and lasts 20 minutes. Following each presentation, the instructor moderates a class discussion that lasts 10 minutes and includes his own summary of the key take-home messages. Presenters are evaluated for the contents of their presentation, clarity, and professionalism in presenting academic concepts. The rest of the class is evaluated for their participation in in-class discussion (such evaluation affects the participation grade). More details on the assignment will be provided at the beginning of the course.

Written feedback will be provided to students after the presentation. However, an exact grade of the presentation will only be available upon request after submission of the second assignment.

Group presentations will only be allowed if class enrolment exceeds 18 students.

Assignment 2

Students are expected to write a concrete 5-page research proposal, in the form of an application for a grant that awards up to 8000 euro for experimental research (similar to [RSF small grants](#)). Such proposal should include:

- The context of the proposed research and rationale of the research
- The proposed methods and analytical approach
- A discussion of the policy implications of the potential research findings
- A brief budget

More details on the assignment will be provided at the beginning of the course.

Students may be allowed to complete this assignment in groups of two, upon agreement with the instructor.

PhD students can submit this assignment in a slightly different format, if the reason is conformity with the requirements of a different funder to which they are really planning to submit the grant application. When this happens, please inform the instructor ahead of time.

Assignment 3 (only for PhD students)

The instructor will collect the research interests of PhD students and assign a recent working paper to referee accordingly. The PhD student's task will be to assess the quality of the paper and the fit for the journal to which the paper is being fictitiously submitted. A referee report paper should begin with a concise summary of the paper's objectives, methodology, and key findings. Then provide a summary evaluation that emphasizes one or more of the following: the significance of the research question, the soundness and rigor of the experimental design, the appropriateness of the data analysis techniques, coherence of the argument, the robustness of the conclusions, or the contribution to the existing literature. Such evaluation should include a recommendation of whether the paper should be accepted, revised, or rejected for this journal. Finally, the report should provide more detailed constructive feedback and specific suggestions for improvement.

Participation grade

The participation grade assumes that students take part, not as passive consumers of knowledge, but as active participants in the exchange, production, and critique of ideas—their own ideas and the ideas of others. Therefore, students should come to class not only having read and viewed the materials assigned for that day but also prepared to discuss the readings and to contribute thoughtfully to the conversation. Participation is marked by its active nature, its consistency, and its quality.

Late submission of assignments: For each day the assignment is turned in late, the grade will be reduced by 10% (e.g. submission two days after the deadline would result in 20% grade deduction).

Attendance: Students are expected to be present and prepared for every class session. Active participation during lectures and seminar discussions is essential. If unavoidable circumstances arise which prevent attendance or preparation, the instructor should be advised by email with as much advance notice as possible. Please note that students cannot miss more than two out of 12 course sessions. For further information please consult the [Examination Rules](#) §10.

Academic Integrity: The Hertie School is committed to the standards of good academic and ethical conduct. Any violation of these standards shall be subject to disciplinary action. Plagiarism, misuse of AI, free riding in group work, and other deceitful actions are not tolerated. See [Examination Rules](#) §16, the Hertie [Plagiarism Policy](#), and [the Hertie Guidelines for Artificial Intelligence Tools](#).

Compensation for Disadvantages: If a student furnishes evidence that he or she is not able to take an examination as required in whole or in part due to disability or permanent illness, the Examination Committee may upon written request approve learning accommodation(s). In this respect, the submission of adequate certificates may be required. See [Examination Rules](#) §14.

Extenuating circumstances: An extension can be granted due to extenuating circumstances (i.e., for reasons like illness, personal loss or hardship, or caring duties). In such cases, please contact the course instructors and the Examination Office *in advance* of the deadline.

4. General Readings

There is no textbook for this class. In preparation for student presentation sessions, students are allowed to skip the readings of 1 out of 3 topics per session.

5. Session Overview

Course session times and dates can be found in the [Course List](#) on *MyStudies*.

Session	Session Title
1	Overview. Causal inference and internal validity. Randomization.
2	Ethics of experiments. Incentives. Deception. Replicability and transparency.
3	External validity. General equilibrium effects. Spillover effects. Threats to scaling.
4	Planning an experiment.
5	Student presentations on internal validity.
6	Student presentations on external validity.
7	Student presentations on methods.
Fall break (21-25 Oct) – no class	
8	Student presentations on scaling.
9	Guest lecture on experimentation at international organizations. (Dr. Benedetta Lerva, World Bank)
10	Developing an experimental project.
11	Student presentations on advances with field experiments.
12	Student presentations on advances with field experiments.
Final Exam Week: no class	

6. Course Sessions and Readings

Please refer to Moodle to access the course readings.

Session 1: Overview. Causal inference and internal validity. Randomization.

Required Readings	Duflo, Esther, Rachel Glennerster, and Michael Kremer. "Using randomization in development economics research: A toolkit." <i>Handbook of development economics</i> 4 (2007): 3895-3962.
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Session 2: Ethics of experiments. Incentives. Deception. Replicability and transparency.

Required Readings	Glennerster, Rachel, and Shawn Powers. "Balancing risk and benefit: Ethical tradeoffs in running randomized evaluations." <i>The Oxford Handbook of Professional Economic Ethics</i> (2016): 366-401.
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Session 3: External validity. General equilibrium effects. Spillover effects. Threats to scaling.

Required Readings	Banerjee, Abhijit V., and Esther Duflo. "The experimental approach to development economics." (2008).
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Session 4: Planning an experiment.

Required Readings	Czibor, Eszter, David Jimenez-Gomez, and John A. List. "The dozen things experimental economists should do (more of)." <i>Southern Economic Journal</i> 86, no. 2 (2019): 371-432.
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Session 5: Student presentations on internal validity.

Presentation topics	<ol style="list-style-type: none">1. Hawthorne effects (Levitt and List 2011)2. Experimenter demand (Zizzo 2010)3. Researcher's degree of freedom and replicability (Gelman and Loken 2013, Open Science Collaboration 2015)
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Required Readings	<p>Levitt, Steven D., and John A. List. "Was there really a Hawthorne effect at the Hawthorne plant? An analysis of the original illumination experiments." <i>American Economic Journal: Applied Economics</i> 3, no. 1 (2011): 224-38.</p> <p>Zizzo, Daniel John. "Experimenter demand effects in economic experiments." <i>Experimental Economics</i> 13, no. 1 (2010): 75-98.</p> <p>Gelman, Andrew, and Eric Loken. "The garden of forking paths: Why multiple comparisons can be a problem, even when there is no "fishing expedition" or "p-hacking" and the research hypothesis was posited ahead of time." <i>Department of Statistics, Columbia University</i> 348 (2013): 1-17.</p> <p>Open Science Collaboration. "Estimating the reproducibility of psychological science." <i>Science</i> 349, no. 6251 (2015): aac4716.</p>
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Session 6: Student presentations on external validity.

Presentation topics	<ol style="list-style-type: none">4. Social preferences lab to real world? (Levitt and List 2007, Camerer 2011)5. Evidence (Abeler and Nosenzo 2015, Snowberg and Yariv 2021)6. Can experts predict experimental results? (DellaVigna and Pope 2018)
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Required Readings	<p>Levitt, Steven D., and John A. List. "What do laboratory experiments measuring social preferences reveal about the real world?." <i>Journal of Economic perspectives</i> 21, no. 2 (2007): 153-174.</p> <p>Abeler, Johannes, and Daniele Nosenzo. "Self-selection into laboratory experiments: pro-social motives versus monetary incentives." <i>Experimental Economics</i> 18, no. 2 (2015): 195-214.</p> <p>Snowberg, Erik, and Leeat Yariv. "Testing the waters: Behavior across participant pools." <i>American Economic Review</i> 111, no. 2 (2021): 687-719.</p>
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	DellaVigna, Stefano, and Devin Pope. "Predicting experimental results: who knows what?." <i>Journal of Political Economy</i> 126, no. 6 (2018): 2410-2456.
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Session 7: Student presentations on methods.

Presentation topics	<p>7. Actual vs hypothetical decisions (Kühberger et al 2002, List and Gallet 2001)</p> <p>8. Within- vs between- subjects (Charness et al 2012)</p> <p>9. Context in experiments (Alekseev et al 2017)</p>
Required Readings	<p>Kühberger, Anton, Michael Schulte-Mecklenbeck, and Josef Perner. "Framing decisions: Hypothetical and real." <i>Organizational Behavior and Human Decision Processes</i> 89, no. 2 (2002): 1162-1175.</p> <p>List, John A., and Craig A. Gallet. "What experimental protocol influence disparities between actual and hypothetical stated values?." <i>Environmental and resource economics</i> 20, no. 3 (2001): 241-254.</p> <p>Charness, Gary, Uri Gneezy, and Michael A. Kuhn. "Experimental methods: Between-subject and within-subject design." <i>Journal of economic behavior & organization</i> 81, no. 1 (2012): 1-8.</p> <p>Alekseev, Aleksandr, Gary Charness, and Uri Gneezy. "Experimental methods: When and why contextual instructions are important." <i>Journal of Economic Behavior & Organization</i> 134 (2017): 48-59.</p>

Session 8: Student presentations on scaling.

Presentation topics	<p>10. Nudges from academia to practice (DellaVigna and Linos 2022)</p> <p>11. Cross-country replication of poverty alleviation programs (Banerjee et al 2015)</p> <p>12. Threats to scaling (Al-Ubaydli et al 2017, Banerjee et al 2017)</p>
Required Readings	<p>DellaVigna, Stefano, and Elizabeth Linos. "RCTs to scale: Comprehensive evidence from two nudge units." <i>Econometrica</i> 90, no. 1 (2022): 81-116.</p> <p>Banerjee, Abhijit, Esther Duflo, Nathanael Goldberg, Dean Karlan, Robert Osei, William Parienté, Jeremy Shapiro, Bram Thuysbaert, and Christopher Udry. "A multifaceted program causes lasting progress for the very poor: Evidence from six countries." <i>Science</i> 348, no. 6236 (2015): 1260799.</p> <p>Al-Ubaydli, Omar, John A. List, Danielle LoRe, and Dana Suskind. "Scaling for economists: Lessons from the non-adherence problem in the medical literature." <i>Journal of Economic Perspectives</i> 31, no. 4 (2017): 125-44.</p> <p>Banerjee, Abhijit, Rukmini Banerji, James Berry, Esther Duflo, Harini Kannan, Shobhini Mukerji, Marc Shotland, and Michael Walton. "From proof of concept to scalable policies: Challenges and solutions, with an application." <i>Journal of Economic Perspectives</i> 31, no. 4 (2017): 73-102.</p>

Session 9: Guest Lecture on experimentation in international organizations.

Required Readings	none
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Session 10: Developing an experimental project.

Required Readings	List, John A. "Why economists should conduct field experiments and 14 tips for pulling one off." <i>Journal of Economic perspectives</i> 25, no. 3 (2011): 3-16.
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Session 11: Student presentations on advances with field experiments.

Presentation topics	13. Displacement effects of labor market policies (Crépon et al 2013) 14. Correspondence studies and discrimination (Bertrand and Mullainathan 2004) 15. Tax compliance (Pomeranz 2015)
Required Readings	Crépon, Bruno, Esther Duflo, Marc Gurgand, Roland Rathelot, and Philippe Zamora. "Do labor market policies have displacement effects? Evidence from a clustered randomized experiment." <i>The quarterly journal of economics</i> 128, no. 2 (2013): 531-580. Bertrand, Marianne, and Sendhil Mullainathan. "Are Emily and Greg more employable than Lakisha and Jamal? A field experiment on labor market discrimination." <i>American economic review</i> 94, no. 4 (2004): 991-1013. Pomeranz, Dina. "No taxation without information: Deterrence and self-enforcement in the value added tax." <i>American Economic Review</i> 105, no. 8 (2015): 2539-69.

Session 12: Student presentations on advances with field experiments.

Presentation topics	16. Deworming and spillovers (Miguel and Kremer 2004) 17. Peer information and power consumption (Allcott and Rogers 2014) 18. Cultural persistence (Lowes et al 2017)
Required Readings	Miguel, Edward, and Michael Kremer. "Worms: identifying impacts on education and health in the presence of treatment externalities." <i>Econometrica</i> 72, no. 1 (2004): 159-217. Allcott, Hunt, and Todd Rogers. "The short-run and long-run effects of behavioral interventions: Experimental evidence from energy conservation." <i>American Economic Review</i> 104, no. 10 (2014): 3003-37. Lowes, Sara, Nathan Nunn, James A. Robinson, and Jonathan L. Weigel. "The evolution of culture and institutions: Evidence from the Kuba Kingdom." <i>Econometrica</i> 85, no. 4 (2017): 1065-1091.

Final Exam Week: no class