

# EC212 Experimental Economics

## (Fall 2024)

Seminar Leader: Israel Waichman

Course Times: Tue 09:00-12:15

Email: [i.waichman@berlin.bard.edu](mailto:i.waichman@berlin.bard.edu)

### Course Description

Experimental economics is the application of experimental methods to economic questions. The advantages of (randomly controlled trials) experiments is that they allow for causal inference. They are used in economics to test the descriptiveness of economic models, to study behavior in cases where theory provides ambiguous predictions (or no predictions), and also to ‘testbed’ economic policies. Experiments are conducted in the ‘lab’ as well as over the internet and in the ‘field.’ The course aims to introduce experimental economics and its various applications. We will conduct some of the experiments in the classroom, providing students with first-hand experience of the economic situations that are being thought. The course consists of three parts: The first part (“the methodology of experimental economics”) introduces experimental economics, explains the main principles of conducting an experiment, and discusses the merits and limitations of experiments. The second part (“applications: Influential experiments in economics”) surveys some of the seminal research in experimental economics (e.g. market experiments, bargaining experiments, biases and heuristics under uncertainty, public good games, etc.). In the third part, students will conduct, analyze, present and write their own small pilot study.

### Learning Outcomes

- Study controlled experiments and their importance to scientific inference
- Discuss the merits (and limitations) of experiments in economics
- Learn how to conduct economic experiments
- Review seminal research in experimental economics: markets experiments, bargaining experiments, prediction markets, public good provision, etc.
- Conduct an own economic experiment and present it in the class.

### Requirements

#### Prerequisites

Participants in the seminar should have passed the "Principles of Economics" and "Microeconomics" courses. It is also highly recommended that they have passed the Statistics course.

## **Textbooks**

The first part of the course is largely influenced by the following textbooks (the relevant part is identical in both books)

- *Experimental Methods: A Primer for Economists* (1994) by Daniel Friedman and Shyam Sunder (Cambridge university press)
- *Economics Lab: An Intensive Course in Experimental Economics* (2004) by Alessandra Cassar and Daniel Friedman (Routledge)

Other relevant reading (journal articles) will be provided during the seminar.

It is mandatory to read one of the following books (these are New York Times bestsellers – not technical textbooks):

- *Thinking, Fast and Slow* (2013) by Daniel Kahneman (Farrar, Straus and Giroux)
- *Noise: A Flaw in Human Judgement* (2021) by Daniel Kahneman, Olivier Sibony, and Cass R. Sunstein (Little Brown Spark)
- *Nudge: Improving Decisions about Health, Wealth and Happiness* (2009) by Richard H Thaler and Cass R Sunstein (Penguin Books)
- *Misbehaving: The Making of Behavioral Economics* (2016) by Richard H Thaler (W. W. Norton & Company)
- *The Voltage Effect: How to Make Good Ideas Great and Great Ideas Scale* (2022) by John A. List (Penguin Random House LLC, NY)

**It is important that you review the material we cover in class at home, including solving again all the exercises that we completed in class.**

## **Attendance**

Attendance at ALL classes is expected. More than two absences (that is absences from two sessions of 90 minutes) in a semester will significantly affect the grade for the seminar.

## **Use of cell phones**

The use of cell phones is not allowed during the classes. Please leave your cell phone in your bag during the classes.

## **Assessment**

Assessment will be based on attendance, preparation for classes, regular and active participation, possible quizzes, presentation of topics from reading material as well as a mid-term (60 minutes) or an equivalent essay and a final empirical work (see below).

### **Grade breakdown**

- Seminar participation, problem sets, and possible quizzes 30%
- Mid-term exam or an equivalent work 30% (if there will be midterm exam, it will take place at around Week 10 – to allow for sufficient accumulation of material)
- Final empirical work 40% (20% presentations (including serving as discussants) 20% final written work). **Attendance in all final presentations is mandatory to pass the course**

### **Final empirical work**

As part of the course each pair of students will conduct an independent (empirical) research project. The aim of the research project is to use field data to answer a well-defined research question. The research project requires the students to obtain and analyze a relevant data set (from an online source or to get the data, e.g., conduct a survey). The students will have to present their project in a workshop held in the final two weeks of the semester (**with a possible 3-hour session in completion week**). Finally, they will have to submit a short research paper.

### **Policy on Late Submission of empirical work**

Please note the policy from the Student Handbook on the submission of essays: *essays that are up to 24 hours late will be downgraded one full grade (from B+ to C+, for example). Instructors are not obliged to accept essays that are more than 24 hours late. Where an instructor agrees to accept a late essay, it must be submitted within four days of the deadline and cannot receive a grade of higher than C.*

*Thereafter, the student will receive a failing grade for the assignment.*

### **Schedule and Course structure**

Classes start on Tuesday, September 3, and run until Tuesday, December 10. Fall break is planned for October 21–October 27. Completion week is from December 16 to December 20.

**Attendance is mandatory during completion week. In principle, all students are required to stay in Berlin during completion week.**

The schedule provided is provisional in order to allow for flexibility. It is the students' responsibility to keep themselves informed of any changes to the schedule provided here. An up-to-date schedule will be maintained by the course management in our Google classroom system. Lecture slides and problem sets will be posted in Google classroom (password will be given in the first class).

### **Tentative course structure:**

#### **Part I: *The Methodology of Experimental Economics***

In this part we introduce the why and how to use experiments for scientific conduct and the principles of experimental economics. At this part we will also provide a brief introduction to game theory, providing the theoretical basis for experiments.

**Part II: *Applications: Influential Experiments Economics Research***

In this part we will study several topics in experimental economics, such as bargaining (including the well-known ultimatum and dictator games), markets and auctions, biases and heuristics, prediction markets and guessing game, labor markets, voluntary provision of public goods and the tragedy of the commons. Possible extensions are experimental finance, gender difference, etc. During the course we will cover (some of) the groundbreaking work of several Nobel prize laureates, among them Reinhard Selten, Vernon Smith, Daniel Kahneman (and Amos Tversky), Richard Thaler, Alvin Roth, and Elinor Ostrom. Before we start this part of the course we will have a brief (non-technical) introduction to game theory.

**Part III: *Research Project***

In this part (which will start parallel to Part II) students will work in pairs to conduct a pilot experimental or a survey study where they will have to collect their own data to test a specific hypothesis. The students are required to shortly present the project during the seminar and also to write a final paper describing their research. We will discuss the details during the course.

*Classes missed due to federal holidays will not be rescheduled.*

(this version: July 10, 2024)