

Economics 1058
Experimental Economics
Harvard University
Prof Lucas Coffman
Fall 2019

Students are responsible for reading and understanding all of the information in this course document.

Meeting time and location: Wednesdays 9 – 11:30am, Memorial Hall 028

Instructor

Lucas Coffman, Littauer 324, coffman@fas.harvard.edu
Office hours are by appointment, encouraged.

Teaching Fellow

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Office hours are by appointment, encouraged.

Summary

This class is an introduction to experimental methods, particularly those developed by Economics. We will discuss in detail all of the steps of an experiment, from design, measurement and randomization, to cost and power analyses. This is strictly a methods course; the experiments we discuss are chosen to give a broad understanding of experimental methods, not a foundation of famous experimental results. Similarly, when we discuss a topic, for example experiments in incentives, the discussion will not be centered on how to optimally incentivize employees, but rather, how to design a careful, controlled experiment to precisely understand how your employees respond to incentives you think might be appropriate. There are two main value-adds from this course. First, you will be equipped to design and run an experiment to answer important questions (whether those questions are academic or for the purpose of an organization for which you are working). Second, in understanding what the optimal experimental design should look like, you will be armed with better lenses through which to view naturally existing data. That is, contrasting the process that produced the naturally existing data with a hypothetical experimental design, you will be able to better judge the faults, and systematic biases, that will affect the data to which you have access.

Topics (Both topics and dates subject to change)

September 4	Introduction and Markets
September 11	Decision-making under risk and time
September 18	Pt 1 Nudges; Pt 2 Good research practices (or the replicability crisis)
September 25	Labor and Employment Policies
October 2	Testing theory – with Joshua Schwartzstein (HBS)
October 9	Discrimination & Gender – with Katherine Coffman (HBS)
October 16	Development: Pt 1 Education; Pt 2 Agency in the household
October 23	Field Experiments within firms – with Michael Luca (HBS)
October 30	Charitable Giving – with Christine Exley (HBS)
November 6	Environment and Physiology in Developing Countries – with Mattie Toma
November 13	Stuff I'm currently working on – with Muriel Niederle (Stanford)
November 20	Student presentations

Grading

There are three components to your semester grade.

22% Attendance and participation

There are 11 classes not counting the shopping period. Two points will be awarded per class based on attendance and participation. You may skip one class without repercussion. If you have any planned activities (e.g. a club event) that conflicts with class, you should use your “freebie” on this conflict; this is not in addition to such conflicts. Arriving late, leaving early, being distracting, and so on will be taken into account when determining this grade each week.

If you would like to commit to which week you will not attend (to avoid the temptation of taking an earlier week off, for example), please let Prof Coffman know.

27% Weekly written pieces

Each week, the instructor will assign a paper (or provide a menu to choose from) that you will read and provide some critical thoughts and questions on. On a few occasions later in the semester, in lieu of reading a paper, the assignment will be a design exercise (e.g. “How might you elicit risk preferences from an illiterate, innumerate subject pool?”). There will be nine such assignments worth 3 percentage points each. (There will be one every week starting the second week until, and including, Nov 13th. After that, you are expected to be working on your final projects exclusively.) As with attendance, you may skip one without affecting your grade; hence, you are expected to complete eight weekly written pieces. If you complete nine, your lowest score will be dropped. Since your grades are on a zero to three scale, the likelihood that doing all nine improves your grade is low. These are due by 6am on Monday each week. Each day that the paper is late results in a one-point deduction. If a paper is one minute late, it is one day late, etc.

If you would like to commit to which week you will not do a weekly reaction (to avoid the temptation of taking an earlier week off, for example), please let Prof Coffman know.

11% Running and presenting an experiment

Each week, one group of two to three students will run an online experiment over the weekend, with the class as subjects, and present the idea, design, and results briefly on Monday. The

experiment will be designed with the professor and will (usually, loosely) be related to the upcoming topic. Which week or topic each student presents is on a first-come, first-served basis.

40% Final presentation and paper

Working in groups of two, students will come up with a novel research question, and design an experiment to answer that question. It is not expected that data will be gathered. On the last day of class, students will present their question and design. Final papers (of roughly 5-10 pages) should be emailed to the professor no later than when the final exam would have been scheduled for this course.

Laptop Policy

Before next week's class, you will decide whether you would like access to your laptop or not. If you choose to have access, you will sit in the back, so that your screen cannot distract others who have opted out. If you have opted out, this is a permanent decision (a "commitment"). No non-laptop screens are allowed (e.g. phones, tablets).

What you can expect

I'm committed to making this course intellectually rewarding, idea-based (not memory-based), personally relevant and interactive. If it's not, please tell me; I'll try to do better.

Feedback

There are three avenues for feedback that I can think of, and I encourage you to use all of them. 1) I will conduct an anonymous survey during the semester. 2) I will typically be available for discussions after class. 3) I will hold office hours by appointment. Please tell us what needs to be improved. We're eager to hear your input.