

Economics 329: Experimental Economics

Northwestern University; 2020 Spring; M/W/F **10:00** am

Almost surely entirely online due to Covid-19

Professor: Scott Ogawa (sogawa@northwestern.edu)

TA: Laia Navarro-Sola (navarrosola@u.northwestern.edu)

Office Hours posted on Canvas

Optional Textbook: “Markets, Games, and Strategic Behavior” by Charles Holt. Reference only; do not buy.

Objective

The primary objective of this course will be to use economic laboratory experiments – essentially interactive classroom activities – to (1) help you learn and solidify canonical economic theories, (2) give you insight into why and how models predict outcomes well and/or poorly, and (3) allow you to design and evaluate experiments, and (4) develop your skills in analyzing data and presenting results. In particular, this class will improve your ability to use economic analysis on *real* data.

Pass/Fail

Per university policy, the course will be Pass/Fail. I expect you to pass, though it will require work on your part. I hope the following system gives you a solid sense of control.

Path 1: Participate in Class and Complete Assignments

There will be regular group assignments due at the start of every class. After each assignment you will evaluate yourself and your groupmates. Groups will be three students and will typically be randomly assigned. During class, a student will be picked to present the work that was just submitted online. Consistently engaged work over the first 9 weeks of the course will result in a pass.

[The above plan is subject to change as the course progresses.]

Path 2: Final Exam

For those who fall short in path 1: You can pass the class by taking a final exam during finals week. I hope and expect this to apply for a small minority of students. The exact nature of this exam depends on circumstances, though every effort will be made to ensure academic integrity. If it becomes clear you have not mastered the skills required for the regular class assignments then you will fail the class.

Project(s)

As the course progresses the assignments will become more involved and may include project write-ups. However, this is very much to be determined.

Topics (*italics* indicate coverage if time permits)

Economic theory that we will review and/or introduce:

Supply and Demand
General Equilibrium
Subgame-perfect Nash equilibrium
Mixed-strategy Nash equilibrium
Auction theory
Adverse selection

Empirical methods:

Difference in means
Power calculations
Regression (linear and semi-log in particular)
Interaction terms

Other goals:

Presentation skills (in this quarter, online presentation skills!)
Get to know your classmates in this time of social isolation.

Possible Experiments

- Markets: Pit Market, *call market*, *double auction*, *lemons market*, labor markets, general-equilibrium trade game,
- Games: Ultimatum/dictator game, *trust game*, *prisoner's dilemma*, *coordination game*, *traveler's dilemma*, *guessing game (p-beauty contest)*, *centipede*, *voluntary contribution*, *gift exchange*, *any 2x2 game*, *auctions (first-price, second-price, all-pay, common-value)*, cheap talk, Bertrand (price) competition, Cournot (quantity) competition.
- Other: Risk preference, time preference, *information cascades*, *asset markets*, *vertical monopolies*, anything else you figure out how to implement.