Topics in Advanced Microeconomic Theory
Economics 8000: Spring 2026

This is an advanced topics class that aims to help Ph.D. students transition from coursework to independent research. The class surveys several active areas of microeconomic theory and gives students the opportunity to practice the important skills of evaluating and communicating research.

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Topics. We will cover at least the following topics:

1. *Learning in games.* Economic analysis of games usually assumes that individuals play an equilibrium. Where does this equilibrium come from? Learning in games studies non-equilibrium adjustment processes and asks which equilibria might arise as a consequence in the long run.

2. *Learning in networks.* Observational learning often takes place in complex social networks. How do the structural properties of such networks influence learning for rational actors?

3. *Learning with psychological agents.* People may derive joy or distress from a piece of news, or they may process information in a non-Bayesian way. How do these psychological considerations affect the design of informational environments that govern how people learn?

4. *Learning with misspecifications.* Learners are misspecified when their prior belief dogmatically excludes the true data-generating process. This literature uses misspecification as a modeling tool to study the consequences of behavioral biases, perceptual errors, and statistical fallacies on learning.

Prerequisites: The first year Ph.D. sequence in the Economics department, or similar graduate-level microeconomics coursework. (Please contact me if you are unsure whether you meet the prerequisites.)

Logistics: We meet on Mondays from 3:30PM to 6:30PM, in PCPSE 203. The first class will be on **Wednesday**, January 14.

There is no textbook for this class, as our discussion will entirely center around journal articles. I will post the relevant papers on the Canvas website.

Assignments and Assessments:

- Referee report (25%). Each student will write one referee report on a recent paper. A referee report is a document that helps journal editors adjudicate whether they should publish a manuscript. For this exercise, your report should summarize the main results and techniques of the paper, critically evaluate the paper's contributions, and suggest some avenues of improvement. I will announce a list of potential papers for this assignment.

- Presentation (25%). Each student will give a 45-minute presentation on a recent paper. Like the referee report, your presentation should both explain the authors' main ideas and offer your own thoughtful commentary on their work. I will announce a list of potential papers for this assignment. These presentations will be scheduled throughout the semester.

- Project proposal (40%). Each student will propose a research project based on the topics we cover in class. Your proposal should contain at least a toy model, and it would be better if you have one or more preliminary results. You will give a presentation on your project proposal at the end of the semester.

- Participation (10%). There will be discussion prompts on the Canvas forum that ask you to reflect on the topics we cover.