

Advanced Microeconomics for Public Policy

Autumn 2023

Instructor Scott Ashworth

Communication Please use the Message function on the Canvas site. I will do my best to answer your message within 24 hours (48 hours over the weekend).

Office Hours Tues. 3:30–4:30 or by appointment, in Keller 2029

TA Haoran Goa

Lectures TTh 11–12:20, in room 0023

TA Session TK

Requirements The course has two requirements: problem sets (50%) and a final exam (50%).

The final exam will be on TK at TK in room TK.

Problem sets will be due every week, before class starts on Tuesday. Late submissions will not be accepted. You can discuss the problems with other students, but you must write up your solutions to hand in independently.

Problem sets can be either handwritten or typed in LaTeX. No other electronic format is acceptable. Probably the easiest way to get started with LaTeX is the cloud application [Overleaf](#). Once you sign up for an account through the university, you can configure Overleaf to sync with Dropbox or GitHub. Doing so is important—Overleaf server outages will not excuse late work.

Prerequisites Intermediate micro (at the level of, e.g., Varian's *Intermediate Microeconomics*) and multivariable calculus (including Lagrange multipliers, vectors and matrices, and implicit differentiation). Elementary real analysis will be helpful.

Reading I will not be following any one textbook very closely. The main reference is my own [lecture notes](#). Other useful references are *Microeconomic Theory*, by Mas-Colell, Whinston, and Green; *Essential Microeconomics*, by John Riley; and (my favorite) *Microeconomic Foundations I: Choice and Competitive Markets*, by David Kreps.

Although it is not at all required for the course, I also recommend getting a copy of *Rational Choice*, by Itzhak Gilboa. This is a short, non-technical overview of all of the topics covered in the PhD core. Read it right now and again at the end of the year, to aid your reflections on how everything fits together.

Schedule

We have 18 course meetings. An approximate schedule of topics and readings follows; N refers to my notes.

1. Models; Preferences (N pp. 4–9)
2. Choices and utility (N pp. 10–13)
3. Independence axiom, expected utility (N pp. 28–33)
4. Risk aversion, more-risk-averse relation (N pp. 35–39) REVISE PAGES
5. Portfolio problems; Stochastic dominance (N pp. 40–49)
6. The basic consumer problem (N pp. 52–55)
7. Constrained optimization and demand (N pp. 55–61)
8. Technology, profit maximization, returns to scale (N pp. 71–76)
9. Supporting hyperplanes; Aggregation and decentralization (N pp. 77–83)
10. Envelope theorem and Shepard’s lemma (N pp. 114–120)
11. Duality and compensated demand, Expenditure function, Slutsky equation (N pp. 127–134)
12. Equivalent and compensating variations; Application to deadweight loss of taxation (N pp. 135–137)
13. Normative Concepts for Policy Analysis (N pp. 92–96)
14. Characterization of Pareto optima (N pp. 97–100)
15. Walrasian equilibrium, Welfare theorems (N pp. 103–106)
16. The jungle economy
17. Foundations of cost-benefit analysis (N pp. 106–108)
18. Catch-up and review

Resources and Policies

General Resources Available to Students

- [Harris Academic Support Programs and Handbook](#)
- [Student Wellness](#)
- [University Learning Resources](#)

Harris School and University of Chicago Policies

- [Harris School Policies](#)
- [University General Policies](#)
- [University Academic Policies](#)
- Policies on audio and video [recordings](#) and [deletion](#).