Instructor  Scott Ashworth

email  sashwort@uchicago.edu. Please put “PPHA 441” in the subject line for correspondence related to the course.

Office  1155–114

Office Hours  Mon. 3–4:30

TAs  Christian Salas (chsp@uchicago.edu). Office hours: Fri. 1:30–2:50 in 140B

Dan Alexander (danalexander@uchicago.edu). Office hours: Wed. 1:30–2:50 in Harris Cafe

Lectures  TTh 1:30–2:50, in room 289A.

TA Session  Mon. 1:30–2:50, in room 140C.

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

    Problem Sets  There will be six or seven problem sets during the quarter. They are due at the beginning of class on Tuesdays. No late problem sets will be accepted.

    You may discuss the problems with other students, but you must write up your solutions individually.

    Exam  Date and time TBA.

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).

Reading  I will not be following any one textbook very closely. I will distribute lecture notes for many of the topics. The other main references are Essential Microeconomics, by John Riley and Lecture Notes in Microeconomic Theory: The Economic Agent, by Ariel Rubinstein. Occasional extra readings will be posted on Chalk.

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. Reading it right now, and again at the end of the year, will help you think about how everything fits together.

**Topics**

**Rational Choice** (≈1 lecture)
Preferences, choices, and utility

**Choice Under Uncertainty** (≈4 lectures)
Independence axiom, expected utility
Risk aversion, More-risk-averse relation, Arrow-Pratt approximations
Stochastic Dominance

**Consumer Theory, I** (≈3 lectures)
The basic consumer problem
Constrained optimization and demand functions
Revealed preference

**Production** (≈3 lectures)
Technology, profit maximization, returns to scale
Supporting hyperplanes, Shadow prices and the economics of the Kuhn-Tucker theorem
Robinson Crusoe Economy

**Welfare Economics** (≈ 3 lectures)
Normative Concepts for Policy Analysis
Characterization of Pareto optima
Walrasian equilibrium, Welfare theorems

**Consumer Theory, II** (≈ 4 lectures)
Envelope theorem
Duality and compensated demand, Expenditure function, Slutsky equation
Equivalent and compensating variations, Application to deadweight loss of taxation
Applications to the second-best