

Microeconomic Theory I

Public Policy 44100

Fall 2015

Instructor Scott Ashworth

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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