Description. This is the first half of Econ 701, focusing on decision, consumer and producer theory. Its prerequisite is Econ 897 (Math Camp).

Lectures. TR, 1:30-3 pm in 100 PCPE

Recitations. Mondays, 1:30-2:30 pm, probably in 101 PCPE

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Office hours: Fridays, 1-3 in 208 PCPE

Emailing. Put “ECON 701” in the subject line when you email us.

Homework. Almost weekly problem sets, graded on a scale 1-10. No late homework will be graded. You will gain the most from spending a lot of time doing the problems, without reading solutions that may be floating about. Study groups are good, but write up your solutions individually. Solutions will be posted to each problem set ex post.

Exams. One 30 minute quiz, one 75 minute exam. Both closed book, notes, and devices

Grading. 20% quiz and 80% midterm. Homework determines borderline grades

Course Materials. Posted on Canvas: [http://canvas.upenn.edu](http://canvas.upenn.edu)

Required Text: Mas-Colell, Whinston and Green, *Microeconomic Theory*

Supplementary Texts:

- Miller, *Notes on Microeconomic Theory*: [https://business.illinois.edu/nmiller/notes.html#download](https://business.illinois.edu/nmiller/notes.html#download)
- Gilboa, *Theory of Decision under Uncertainty*

Important Dates.

- Sept 20: Quiz (in class)
- Oct 4: No class (Fall break)
- Oct 18: Exam (in class)
Tentative Topics Outline

1. Decision Theory Foundations (MWG 1)
   Preferences. Rational preferences. Utility representation
   Behavior: Feasible sets and choice rules
   Rational choice: weak axiom, rationalizability theorem

   Commodities (goods, dates, states). Consumption and budget sets
   Walrasian demand correspondence. Homogeneity and Walras’ law.
   Comparative statics
   Preference assumptions
   Utility representation theorems

3. Demand Theory (MWG 3.D-H)
   Utility maximization: Walrasian demand and indirect utility functions
   Cost minimization: Hicksian demand and expenditure functions
   Envelope theorem. Consequences: Shephard’s lemma, Roy’s identity
   Slutsky decomposition
   Briefly: Integrability

4. Further Topics in Demand Theory (MWG 3.I-J, MWG 4)
   Welfare evaluation - consumer surplus measures
   Revealed preference

5. Theory of the Firm (MWG 5)
   Production sets and technology
   Profit maximization and cost minimization
   Comparative statics. Le Chatelier’s principle

   Expected utility theorem (vNM)
   Comparing and measuring risk aversion (Pratt’s Theorem)
   Briefly: Subjective probability theorem (Savage)