

Foundations of Social Sciences

Instructor Info —



BAX 215

http://www.laura-doval.com

ldoval@caltech.edu

Course Info –

💾 🛛 Mo & Wed

10:30 am -12 pm

BAX 125

Overview

The course will introduce concepts and tools of importance for almost all social scientists (pure and applied theorists and empiricists alike): choice theory, demand/production analysis, comparative statics, and uncertainty. We will critically consider the underpinnings of welfare analysis, which underlies most economics. We will see some very elementary and classic examples of economic methodology: simple models used to highlight basic economic effects.

Grading Scheme

40% Homework 60% Final

Problem Sets

Problem sets are due at 12 PM on their due date and must be left in my mailbox on the first floor in Baxter. Late problem sets are not accepted, and there are no make - up problem sets.

I encourage you to work in groups of 2 to 4 as long as all group members are clearly listed at the top of every copy and each group member submits their copy. However, you should try out the problems by yourselves, before discussing them in groups, to make sure you understand them.

There is a 20 points penalty (out of 100) for problems sets that are not typed in $\ensuremath{\texttt{ET}_EX}$.

Final

There are no make-up exams and no rescheduling. No calculators, cell phones, laptops, or other electronic devices may be used. The exam is closed-book, but you may bring one double-sided 8.5×11 page of notes written in your own handwriting.

Important Dates

December 11: Final

Reading Material

I follow MasCollel, Whinston, and Green, Microeconomic Theory, Oxford University Press, New York and Oxford, 1995.

The books below complement the material covered in class:

* Books

- [1] Christopher P Chambers and Federico Echenique. *Revealed preference theory*. Vol. 56. Cambridge University Press, 2016.
- [2] Christian Gollier. *The economics of risk and time*. MIT press, 2004.
- [3] David Kreps. *Notes on the Theory of Choice*. Westview press, 1988.
- [4] David M Kreps. *A course in microeconomic theory*. Princeton University Press, 1990.
- [5] Hal R Varian. *Microeconomic analysis*. 338.5 V299m 1978. WW Norton, 1978.

Class Schedule

MODULE	1: Consumer Choice			
Lecture 1	October 2	Abstract Choice	PS 1 out	
Lecture 2	October 4	Abstract Choice		
Lecture 3	October 7	Demand Theory		
Lecture 4	October 9	Demand Theory	PS 2 out	PS 1 in
Lecture 5	October 14	Utility		
Lecture 6	October 16	Indirect Utility and Expenditure Minimization		
Lecture 7	October 21	Envelope Theorem and Duality	PS 3 out	PS 2 in
Lecture 8	October 23	Indirect Utility and Expenditure Minimization revited	⁄is-	
Lecture 9	October 28	Integrability		
Lecture 8	October 30	From Demand to Utility		
Lecture 11	November 4	Household Demand		
Lecture 12	November 6	Welfare Analysis		PS 3 in
Lecture 13	November 11	Aggregation		
MODULE	2: Producer Theory			
Lecture 14	November 13	Production	PS 4 out	
Lecture 15	November 18	Production: Aggregation and Integrability		
Lecture 16	November 20	Monotone Comparative Statics		
Lecture 17	November 25	Monotone Comparative Statics		
MODULE	3: Choice under Uncertainty			
Lecture 18	November 27	Uncertainty	PS 5 out	PS 4 in
Lecture 19	December 2	Uncertainty		
Lecture 20	December 4	Uncertainty		
-	December 6		PS 5 in	
-	December 11	Final		