

Northwestern University  
Kellogg School of Management

## **MECS-550-1, Economic Theory I: Decision Theory**

(Outline with readings for each week on Canvas)

Prof. Peter Klibanoff  
**Fall 2017**

Office: Kellogg Global Hub 3157, (847)491-5153  
e-mail: peterk@kellogg.northwestern.edu

Time: Mondays 1:30-4:30pm (**begins Mon, Sept. 25<sup>th</sup>**) Place: Kellogg Global Hub 4301

### Overview

MECS-462 is a PhD-level course on decision theory and will focus mainly on axiomatic theories of individual decision making under risk and uncertainty. First the course will briefly explore utility theory under certainty and the notion of preferences and their representation. Then we will study in detail the classic theories of decision under risk and uncertainty: von Neumann and Morgenstern, Anscombe and Aumann, and Savage. This forms the basic grounding in the subject. From here we will explore a selection of topics that expand on the classical work in various directions and are nearer to the current research frontier. These topics may include: (1) Ellsberg's paradox, models of ambiguity and ambiguity attitude; (2) dynamics -- preferences over time, dynamic consistency, updating, time and risk; (3) probabilistic sophistication; (4) risk measures; (5) models of unforeseen contingencies/preference for/against flexibility; (6) incomplete preferences; (7) prospect theory; (8) stochastic choice. Which of these or other topics we cover may vary depending on time and the interests of members of the class.

The course will include lecture by me, prepared presentations by students, and participation by everyone.

### Course requirements

The requirements include completion of problem sets, prepared class presentation/write-up on a paper from the literature, and participation in class discussion. The grade will be a reflection of all components.

### Text (Key for first part of course)

Kreps, David M., Notes on the Theory of Choice (in the series *Underground Classics in Economics*, Westview Press: Boulder and London, 1988.)