Decision Theory: Philosophical Foundations (Prof Lara Buchak)

At its core, decision theory is a mathematical theory that relates preference, belief, and desire. This theory is used in a variety of ways: to guide action, to explain and predict behavior, to normatively assess choices, and to gain access to mental states. However, before it can be adequate for any of these purposes, its theoretical core needs to be expanded upon. In particular, the notions of preference, belief, and desire all need to be interpreted.

This syllabus explores foundational issues in decision theory. In particular, it focuses on debates surrounding the analysis of preference, belief, and desire. Topics include the relationship between preference and behavior; incommensurable values; substantive theories of utility; whether degrees of belief can be vague; and other issues.

I. Decision Theory and Its Uses


II. Preference and Utility


III. Degrees of Belief


