Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG

UNIVERSITY OF HAMBURG
BUSINESS SCHOOL

PhD Course

Decision Theory

Block course:

Tuesday, June 3, 2025; 9 a.m. – 4 p.m.;	room 0005.1., Moorweidenstraße 18
Wednesday, June 4, 2025; 9 a.m. – 4 p.m.;	1.) room 0005.1., Moorweidenstraße 18,
	2.) room 4030/4031, Esplanade 36
Thursday, June 5, 2025; 9 a.m. – 4 p.m.;	room 0005,1, Moorweidenstraße 18
Friday, June 6, 2025; 9 a.m. – 1 p.m.;	room 0029, Moorweidenstraße 18

Lecturers: **Prof. Dr. Richard Peter (**E-mail: richard-peter@uiowa.edu)

Prof. Dr. Petra Steinorth (E-Mail: petra.steinorth@uni-hamburg.de)

Course Value: 5 credit points (2 SWS)

Assessment: Research presentation; grading will be pass/fail.

Course language: English

Registration: **Please register via STiNE.**

Registration deadline is **29 April 2025**.

For all organizational matters please contact andrea.buekow@uni-hamburg.de.

Places will be allocated in order of received registrations.

Course Objectives:

- To recognize, explain and discuss theories of normative and descriptive decision-making under risk and uncertainty
- To apply theories of decision-making under risk and uncertainty in the health domain in the context of medical decision-making and health care supply decisions
- To explain, analyze and develop research hypotheses rooted in normative or descriptive theories of decision-making under risk and uncertainty

Prerequisites/Literature: To be distributed

Course description:

Normative and descriptive decision theories aim at predicting and/or understanding decision making in different context and also apply to medical decision making. The aim of this course is to give students the foundation of the most commonly utilized and their applications to medical decision making.

PhD students can either present how their own research project roots in normative and descriptive decision theory or present a seminal paper from the course list on medical decision making.

The course is designed for PhD students of the Research Training Group 'Managerial and economic dimensions of health care quality' but is open to a wider range of students.

Course schedule:

Tuesday, June 3 9 a.m. – 4 p.m.	Normative decision theory: • Expected utility • Irreplaceable commodities • Value of a statistical life (VSL) • Prevention and precaution	Richard Peter
Wednesday, June 4 9 a.m. – 4 p.m.	Descriptive theories of decision making: • Rank-dependent utility • Prospect theory • Cumulative prospect theory • Thinking fast and thinking slow • Behavioral biases with applications to medical decision making	Petra Steinorth
Thursday, June 5 9 a.m. – 4 p.m.	Assignment: Prepare your presentation	All
Friday, June 6 9 a.m. – 1 p.m.	Presentations and discussion	All