

Bavarian Graduate Program in Economics
(BGPE)

Advanced Microeconomics Syllabus

Christoph Kuzmics

March 3-8, 2024

Course Outline

The course provides a thorough treatment of selected topics in decision theory, game theory, information economics, and mechanism and information design. Classes will be a mix of lectures, exercises, and experiments.

Prerequisites

The course is self contained. Basic knowledge of probability and calculus are assumed and an undergraduate background in microeconomics and game theory is useful (but not necessary).

Tentative Lecture Plan

Sunday (3 March)

19:00-19:30 Brief Introduction

19:30- Dinner

Monday - Thursday schedule

7:00-9:00 Breakfast

9:00-10:30 Class

10:30-11:00 Coffee break

11:00-12:30 Class

12:30-14:00 Lunch

14:00-15:30 Class

15:30-16:00 Coffee break

16:00-17:30 Class

19:00- Dinner

Friday - schedule

7:00-9:00 Breakfast
9:00-10:30 Class
10:30-11:00 Coffee break
11:00-12:30 Class
12:30-14:00 Lunch

Content

Monday Dominance in Games, Decision Theory, and Statistics, Iterated Dominance, Mixed Strategies, Nash equilibrium, Focal Points, Evolutionary Stable Strategies

Tuesday Backward Induction, Subgame Perfect Equilibrium, Repeated Games, Perfect Bayesian and Sequential Equilibrium

Wednesday Games with Incomplete Information: Lying, Adverse Selection, Signalling, Herding, Strategic Communication (Cheap Talk)

Thursday Information and Mechanism Design: Bayesian Persuasion, Mechanisms (for selling and for public good provision), an impossibility result (Myerson - Satterthwaite in dominant strategies), from thin to thick markets

Friday Reflection and discussion about what we have learnt