

Course Name	Game theory
Contents and Objectives	<p><u>Content:</u></p> <ul style="list-style-type: none"> • Zero-sum, matrix and bimatrix games • Nash and subgame perfect equilibrium • Repeated and Bayesian games • Core, nucleolus and Shapley value • Auctions, bargaining, voting, oligopoly, bankruptcy <p><u>Objectives of the course:</u> The students are acquainted with the basic concepts from cooperative and noncooperative game theory. They can model the strategic interactions of players and analyze them by using mathematical tools. They can apply game-theoretic results in the economic context and adequately interpret them.</p>
Teaching	<p>This course consists of lectures and exercise classes.</p> <ul style="list-style-type: none"> • Lecture: Game theory (4h/week) • Exercise class: Game theory (2h/week) <p>This class can be taught remotely.</p>
Prerequisites	Basic notions of Analysis and Linear Algebra
Verwendbarkeit des Moduls	-
Examination	Oral exam (30 minutes)
Credits	8 ECTS points
Frequency	This course is given at least every third year.
Workload	The estimated total working time for this course is 240 hours.
Duration	This course is given during one semester.