

Georg-August-Universität Göttingen Module M.WIWI-VWL.0166: Empirical Applications of Game Theory		6 C 2 WLH
Learning outcome, core skills: This module aims to improve students' understanding of strategic decision-making. It will enable them to understand the strategic structure of an economic or social situation and to predict how people will behave in that situation. At the end of the seminar, they will be able to identify situations that involve strategic considerations, to model these as games, and to compare predictions from a game theoretic model with empirical and experimental data.		Workload: Attendance time: 28 h Self-study time: 152 h
Course: Empirical Applications of Game Theory (Seminar) <i>Contents:</i> This unit is about game theory and its applications to economic and social decision problems. Economists and other social scientists use game theory to understand, model, and predict people's behavior in strategic situations. These are situations where the welfare of any person depends not only of what that the person does himself, but also on the decisions made by other people. Game theory has application in all areas of economics and many economic and other social situations require the use of tools from game theory. For example, game theory is used to analyze issues related to competition policy, auctions, matching, bargaining, status signaling, education choices, new technologies adoption, patenting, betting markets, insurance, the emergence of social norms, trade and environmental agreements, incentive systems, etc.		2 WLH
Examination: Essay (max. 10 pages) and presentation (ca. 30 minutes), each will count for 50 % of the grade, each may be in either English or German ! Empirical Applications of Game Theory Examination prerequisites: Active participation in seminars and attendance to presentations.		6 C
Examination requirements: Students will prepare a presentation and write an essay on a topic of their choice that has a strategic element and that deals with an important economic or social phenomenon. In the presentation and essay, they will have to: <ul style="list-style-type: none"> • explain why their topic is important and show they understand the economic situation they chose to analyze, • describe the players, how they interact, and represent the situation as a game in extensive form, • use game theory to get a prediction of the outcome, • give an economic/social explanation and interpretation of the predicted outcome, • compare predictions of the outcome with empirical and experimental observations. 		
Admission requirements: none	Recommended previous knowledge: B.WIWI-VWL.0028 Introduction in Game Theory	

Language: English, German	Person responsible for module: Dr. Alexia Gaudeul
Course frequency: each summer semester	Duration: 1 semester[s]
Number of repeat examinations permitted: twice	Recommended semester: 1 - 4
Maximum number of students: not limited	