

## Syllabus

<b>Name:</b>			
<b>Strategie und Wettbewerb I - Introduction to Game Theory</b>			
<b>Responsible:</b>			
Professor Toker Doganoglu, Ph.D, Chair of Industrial Economics			
<b>Program:</b>	<b>Type:</b>	<b>Term:</b>	<b>ECTS:</b>
Bachelor	Lecture	Winter	5 CP
<b>Contents &amp; Objectives:</b>			
Students which complete this course will be able to			
(i) explain different equilibrium concepts (Nash equilibrium, subgame perfect equilibrium, bayesian equilibrium, perfect bayesian equilibrium);			
(ii) explain for which kind of strategic situation each of these equilibrium concepts were developed;			
(iii) apply these concepts to simple realistic strategic situations;			
(iv) choose the appropriate equilibrium concept which fits best to a given strategic situation			
<b>Prerequisites:</b>			
<b>None</b>			
<b>Course Structure:</b>			
<b>Week</b>	<b>Content</b>		
1	I Static games with complete information I.a Concept of a game		
2	I.b Solution concepts and the Nash equilibrium		
3	I.c Continuous strategy sets		
4	I.d Nash equilibrium in mixed strategies		
5	II Dynamic games with complete information II.a Subgame perfect Nash equilibrium		
6	II.b Repeated games		
7	III Static games with incomplete information: Bayesian Nash equilibrium		
8	IV Dynamic games with incomplete information IV.a Perfect Bayesian Nash equilibrium		
9	IV.b Signaling games		
10	V		
11	VI		
12			

**Literature:**

- [1] Games Of Strategy, Dixit and Skeath (and Reiley), Norton.
- [2] Various other readings that will be made available on WueCampus.
- [3] Game Theory for Applied Economists, R. Gibbons, Princeton.

<b>Grading:</b>
60 Minute Exam
<b>Contact:</b>
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