

## Course Descriptions NonDegree 2020-2021

Course Title	Game Theory and Economics																																																			
Course Code	EBC2110																																																			
ECTS Credits	6,5																																																			
Assessment	Whole/Half Grades																																																			
Period	Period	Start	End	Mon	Tue	Wed	Thu	Fri																																												
	2	26-10-2020	11-12-2020	X		X	X																																													
Level	Advanced																																																			
Coordinator	Dries Vermeulen For more information:d.vermeulen@maastrichtuniversity.nl																																																			
Language of instruction	English																																																			
Goals	Knowledge of the main concepts in cooperative and non-cooperative game theory; skills in applying these concepts in economic models.																																																			
Description	<p>PLEASE NOTE THAT THE INFORMATION ABOUT THE TEACHING AND ASSESSMENT METHOD(S) USED IN THIS COURSE IS WITH RESERVATION. THE INFORMATION PROVIDED HERE IS BASED ON THE COURSE SETUP PRIOR TO THE CORONAVIRUS CRISIS. AS A CONSEQUENCE OF THE CRISIS, COURSE COORDINATORS MAY BE FORCED TO CHANGE THE TEACHING AND ASSESSMENT METHODS USED. THE MOST UP-TO-DATE INFORMATION ABOUT THE TEACHING/ASSESSMENT METHOD(S) WILL BE AVAILABLE IN THE COURSE SYLLABUS.</p> <p>This course discusses the main concepts from cooperative and non-cooperative game theory:</p> <ul style="list-style-type: none"><li>- Cooperative game theory: core, Shapley value, nucleolus.</li><li>- Non-cooperative game theory: Nash equilibrium, subgame perfect equilibrium, Bayesian and perfect Bayesian equilibrium.</li></ul> <p>The emphasis will be on concepts and applications. Applications range from oligopoly theory to job market signalling, investment policies, organisational strategies, and cost allocation.</p>																																																			
Literature	Game Theory: A multi-leveled approach, author: Hans Peters/Springer 2015 2nd edition.																																																			
Prerequisites	<p>1. The course is open for all students, although Economics students should be aware of the challenging technical level of this course. The course Thinking strategically could be a proper alternative.</p> <p>2. This course is compulsory for 2nd-year students Econometrics and Operations Research.</p> <p>3. Exchange students need to follow a Bachelor in economics, not in business and must have a decent level in mathematics, especially calculus. Some prior knowledge about microeconomics would be helpful.</p> <p>An advanced level of English.</p>																																																			
Teaching methods	PBL / Lecture / Assignment																																																			
Assessment methods	Participation / Written Exam																																																			
Evaluation in previous academic year	For the complete evaluation of this course please click <a href="http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM">http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM</a>																																																			
This course belongs to the following programme / specialisation	<table><tr><td>Bachelor Economics and Business Economics - Economics</td><td>Year 3 Quantitative Economics Elective(s)</td></tr><tr><td>Bachelor Economics and Business Economics - Emerging Markets</td><td>Year 3 Elective Course(s)</td></tr><tr><td>Bachelor Economics and Business Economics - Economics and Management of Information</td><td>Year 2+3 Quantitative Economics Elective(s)</td></tr><tr><td>Bachelor Economics and Business Economics - International Business Economics</td><td>Year 3 QE Elec(s) - Maj Accounting</td></tr><tr><td>Bachelor Economics and Business Economics - International Business Economics</td><td>Year 3 QE Elec(s) - Maj Finance</td></tr><tr><td>Bachelor Economics and Business Economics - International Business Economics</td><td>Year 3 QE Elec(s) - Maj Inf Mgmt</td></tr><tr><td>Bachelor Economics and Business Economics - International Business Economics</td><td>Year 3 QE Elec(s) - Maj Marketing</td></tr><tr><td>Bachelor Economics and Business Economics - International Business Economics</td><td>Year 3 QE Elec(s) - Maj Org</td></tr><tr><td>Bachelor Economics and Business Economics - International Business Economics</td><td>Year 3 QE Elec(s) - Maj SCM</td></tr><tr><td>Bachelor Economics and Business Economics - International Business Economics</td><td>Year 3 QE Elec(s) - Maj Strategy</td></tr><tr><td>Bachelor Econometrics and Operations Research</td><td>Year 2 Compulsory Course(s)</td></tr><tr><td>Bachelor International Business - Emerging Markets</td><td>Year 3 Elective Course(s)</td></tr><tr><td>Bachelor International Business</td><td>Year 3 QE Elec(s) - Maj Accounting</td></tr><tr><td>Bachelor International Business</td><td>Year 3 QE Elec(s) - Maj Finance</td></tr><tr><td>Bachelor International Business</td><td>Year 3 QE Elec(s) - Maj Inf Mgmt</td></tr><tr><td>Bachelor International Business</td><td>Year 3 QE Elec(s) - Maj Marketing</td></tr><tr><td>Bachelor International Business</td><td>Year 3 QE Elec(s) - Maj Org</td></tr><tr><td>Bachelor International Business</td><td>Year 3 QE Elec(s) - Maj SCM</td></tr><tr><td>Bachelor International Business</td><td>Year 3 QE Elec(s) - Maj Strategy</td></tr><tr><td>SBE Exchange Bachelor</td><td>Bachelor Exchange Courses</td></tr><tr><td>SBE Exchange Master</td><td>Bachelor Exchange Courses</td></tr><tr><td>SBE Non Degree Courses</td><td>Bachelor Courses</td></tr></table>								Bachelor Economics and Business Economics - Economics	Year 3 Quantitative Economics Elective(s)	Bachelor Economics and Business Economics - Emerging Markets	Year 3 Elective Course(s)	Bachelor Economics and Business Economics - Economics and Management of Information	Year 2+3 Quantitative Economics Elective(s)	Bachelor Economics and Business Economics - International Business Economics	Year 3 QE Elec(s) - Maj Accounting	Bachelor Economics and Business Economics - International Business Economics	Year 3 QE Elec(s) - Maj Finance	Bachelor Economics and Business Economics - International Business Economics	Year 3 QE Elec(s) - Maj Inf Mgmt	Bachelor Economics and Business Economics - International Business Economics	Year 3 QE Elec(s) - Maj Marketing	Bachelor Economics and Business Economics - International Business Economics	Year 3 QE Elec(s) - Maj Org	Bachelor Economics and Business Economics - International Business Economics	Year 3 QE Elec(s) - Maj SCM	Bachelor Economics and Business Economics - International Business Economics	Year 3 QE Elec(s) - Maj Strategy	Bachelor Econometrics and Operations Research	Year 2 Compulsory Course(s)	Bachelor International Business - Emerging Markets	Year 3 Elective Course(s)	Bachelor International Business	Year 3 QE Elec(s) - Maj Accounting	Bachelor International Business	Year 3 QE Elec(s) - Maj Finance	Bachelor International Business	Year 3 QE Elec(s) - Maj Inf Mgmt	Bachelor International Business	Year 3 QE Elec(s) - Maj Marketing	Bachelor International Business	Year 3 QE Elec(s) - Maj Org	Bachelor International Business	Year 3 QE Elec(s) - Maj SCM	Bachelor International Business	Year 3 QE Elec(s) - Maj Strategy	SBE Exchange Bachelor	Bachelor Exchange Courses	SBE Exchange Master	Bachelor Exchange Courses	SBE Non Degree Courses	Bachelor Courses
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