Course Descriptions Bachelor 2022-2023

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	31-10-2022	16-12-2022	X		X		X

Level	Advanced
Coordinator	Marc Schröder For more information:m.schroder@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	PLEASE NOTE THAT THE INFORMATION ABOUT THE TEACHING AND ASSESSMENT METHOD(S) USED IN THIS COURSE IS WITH RESERVATION. A RE-EMERGENCE OF THE CORONAVIRUS AND NEW COUNTERMEASURES BY THE DUTCH GOVERNMENT MIGHT FORCE COORDINATORS 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. This course discusses the main concepts from non-cooperative and cooperative game theory. The following topics will be discussed: * Non-cooperative game theory: Nash equilibrium, subgame perfect equilibrium, Bayesian and perfect Bayesian equilibrium. * Cooperative game theory: core, Shapley value, nucleolus. The emphasis will be on understanding and proving properties of the solutions concepts and some applications. Applications range from oligopoly theory to job market signalling, auctions and cost allocation.
Literature	Game Theory: A multi-leveled approach, author: Hans Peters/Springer 2015 2nd edition.
Prerequisites	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. 2. This course is compulsory for 2nd-year students Econometrics and Operations Research. 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. An advanced level of English.
Teaching methods	PBL / Lecture / Groupwork
Assessment methods	Written Exam / Assignment
Evaluation in previous academic year	For the complete evaluation of this course please click http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM

This course belongs to the following programme / specialisation

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