

2.00 credits

15.0 h

Language :	English
Place of the course	Louvain-la-Neuve
Main themes	Game theory is a bag of analytical tools designed to help us to understand the phenomena that we observe when decision makers interact.
Learning outcomes	
Evaluation methods	Homework (50%) + Presentation of a research article (50%)
Teaching methods	The course consists of lectures. The topics will be introduced during the lectures. Compulsory homeworks will be assigned to students. Reading assignments are also possible.
Content	<p>Topics in Game Theory</p> <p>Part A Network Science and Economics</p> <ul style="list-style-type: none"> • Representing, Measuring and Analyzing Networks • Learning and Diffusion on Networks • Games and Behavior on Networks • Game-Theoretic Modeling of Network Formation <p>Part B Market Design and Matching</p> <ul style="list-style-type: none"> • The Basic Matching Model • The Medical Match • Assignment Markets • School Allocation • Course Allocation • Kidney Exchange
Inline resources	Slides, homeworks, exercises, compulsory readings will be available on the course webpage on Moodle UCL (http://moodleucl.uclouvain.be/).
Bibliography	<ul style="list-style-type: none"> • Social and economic networks by Matthew O. Jackson, Princeton University Press (2008). • Connections by Sanjeev Goyal, Princeton University Press (2007). • Network science by Albert-Laszlo Barabasi, Cambridge University Press (2016). • The Oxford handbook of the economics of networks edited by Yann Bramoullé, Andrea Galeotti and Brian W. Rogers, Oxford University Press (2016). • Market design: auctions and matching, by Guillaume Haeringer, MIT Press (2018).
Faculty or entity in charge	ECON

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Economics: Econometrics	ETRI2M	2		