



5.00 credits

30.0 h

Q2

Teacher(s)	Vannetelbosch Vincent ;
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><b>Topics in Game Theory</b></p> <p><b>Part A Network Science and Economics</b></p> <ul style="list-style-type: none"> <li>• Representing, Measuring and Analyzing Networks</li> <li>• Learning and Diffusion on Networks</li> <li>• Games and Behavior on Networks</li> <li>• Game-Theoretic Modeling of Network Formation</li> </ul> <p><b>Part B Market Design and Matching</b></p> <ul style="list-style-type: none"> <li>• The Basic Matching Model</li> <li>• The Medical Match</li> <li>• Assignment Markets</li> <li>• School Allocation</li> <li>• Course Allocation</li> <li>• Kidney Exchange</li> </ul>
Inline resources	Slides, homeworks, exercises, compulsory readings will be available on the course webpage on Moodle UCL ( <a href="http://moodleucl.uclouvain.be/">http://moodleucl.uclouvain.be/</a> ).
Bibliography	<ul style="list-style-type: none"> <li>• Social and economic networks by Matthew O. Jackson, Princeton University Press (2008).</li> <li>• Connections by Sanjeev Goyal, Princeton University Press (2007).</li> <li>• Network science by Albert-Laszlo Barabasi, Cambridge University Press (2016).</li> <li>• The Oxford handbook of the economics of networks edited by Yann Bramoullé, Andrea Galeotti and Brian W. Rogers, Oxford University Press (2016).</li> <li>• Market design: auctions and matching, by Guillaume Haeringer, MIT Press (2018).</li> </ul>
Faculty or entity in charge	ECON

<b>Programmes containing this learning unit (UE)</b>				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Economics: Econometrics	<a href="#">ETRI2M</a>	5		
Master [60] in Economics : General	<a href="#">ECON2M1</a>	5		
Master [120] in Economics: General	<a href="#">ECON2M</a>	5		