




5.00 credits

30.0 h

Q2

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| 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>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 | 5 | |  |
| Master [60] in Economics : General | ECON2M1 | 5 | |  |
| Master [120] in Economics: General | ECON2M | 5 | |  |