


In view of the health context linked to the spread of the coronavirus, the methods of organisation and evaluation of the learning units could be adapted in different situations; these possible new methods have been - or will be - communicated by the teachers to the students.

5 credits

15.0 h

Q1 and Q2

| | |
|-----------------------------|---|
| Language : | English |
| Place of the course | Louvain-la-Neuve |
| Aims | <i>The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".</i> |
| Evaluation methods | Due to the COVID-19 crisis, the information in this section is particularly likely to change. Homework (25%) + Presentation of a research article (50%) + Writing of a research proposal (25%) |
| Teaching methods | Due to the COVID-19 crisis, the information in this section is particularly likely to change. 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>Network Science and Economics</p> <p>The goal of the course is to provide the tools for understanding how and why networks form, how they influence behavior in an interactive world, how they shape collective decision making, opinion formation, and diffusion dynamics. The course puts emphasis on economic models of network formation (R&D collaborations; Interantional trade; Labor market; Risk-sharing; Pricing).</p> <p>Content:</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 |
| 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). |
| Faculty or entity in charge | ECON |

| Programmes containing this learning unit (UE) | | | | |
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| Program title | Acronym | Credits | Prerequisite | Aims |
| Master [120] in Economics: Econometrics | ETRI2M | 5 | |  |