

## Course description

<b>Course title:</b> Network Economics	<b>Neptune code of course:</b> GTGKG250MNA Institute of Economic Theory and Methodology <b>Course type:</b> elective
<b>Course coordinator</b>	Zoltan Bartha, Phd zoltan.bartha@ekon.me Building A4 Room 418
<b>Recommended semester:</b> Spring	<b>Precondition:</b> -
<b>Time of classes:</b>	Thursday 8:00-9:30
<b>Place of classes:</b>	Building A4 Room 421B
<b>Number of lessons/week:</b> 2+0	<b>Acknowledgement of course completion:</b>
<b>Credit value:</b> 3	<b>Training format:</b> full-time
<p><b>Aim and content of course:</b> The course presents general microeconomic and macroeconomic models that have special importance in the age of networked computer systems, and shows the challenges the society and the labour market faces in the next decade. Having finished the course students will have a good understanding of the way information- and knowledge-related businesses work, and will get to know methods that help to reap the benefits of the networked economy.</p> <p><b>Competences to be developed:</b> <i>Knowledge:</i> T1, T5, T7 <i>Skills:</i> K1, K4 <i>Attitudes:</i> A1, A2 <i>Autonomy and responsibility:</i> AF5, AF8</p>	
<p><b>Virus-related updates</b> The second semester of the 2020/21 academic year is started in an online teaching format. We have no reliable information yet, but it can be expected that we will switch back to the traditional format sometime during the semester. The exact date of the switch is a mystery.</p> <p>Online classes are held on GoToWebinar. Please, register for the course using the link below, and you will receive a confirmation email containing information about joining the webinar: <a href="https://attendee.gotowebinar.com/register/7367820133933667856">https://attendee.gotowebinar.com/register/7367820133933667856</a></p> <p>All activities (classes, student presentations, tests) will be done online until we switch back to the old ways. Try to make sure that you have decent internet connection, and you connect from a device that has a microphone and a face camera installed.</p>	
<b>Thematic description of course content:</b>	
	<b>Lecture:</b>
11 Feb	The age of the intelligent machines – trends & consequences
18 Feb	The benefit of the new technologies – how to measure it
25 Feb	The spread – costs and dangers
4 Mar	What should we do to be prepared?
11 Mar	Microeconomics approach: knowledge products and cost structure
18 Mar	Consumer and producer surplus
25 Mar	Lock-in
1 Apr	Network effect
8 Apr	Final test
15 Apr	Rector's study break – no teaching
22 Apr	Dean's study break – no teaching
29 Apr	Student presentation
6 May	Student presentation
13 May	Rector's study break – no teaching
<p>Method and evaluation of in-semester assessment: <i>Requirements for obtaining the signature:</i> at least 1 class participation points &amp; at least 5 presentation points</p>	

Students are required to make a presentation on a previously agreed topic. The presentation should be approx. 15 minutes long.

**Suggested topic of the presentation:** How did COVID effect firms/communities connected to the network economy?

**Format of the presentation:** PPT, ~15 minutes (10-15 slides)

**Student task:** think about an area that is connected to network economy (e.g. internet-based company; social media-based community; activity that makes use of digital application, artificial intelligence etc.); present the following: 1) describe the area you will present about; 2) describe the connection with network economy; 3) describe the effects of COVID on the area; 4) conclusion: was the impact of COVID negative or beneficial; what were the costs and the benefits; who were the winners and the losers; what is the overall effect on the society? Always cite & reference your sources.

**Deadlines:**

- Finalising the two team members & agreeing on the topic of presentation: 25/02/2021 (you will not be able to complete the course if you do not have a team or a topic by this date)
- Sending the PPT to zoltan.bartha@ekon.me: 25/04/2021  
(The maximum points that can be obtained for the presentation (15) is decreased by one with every day that you are late with)
- Presentation: for time & place see the syllabus and consult the instructor

If the presentation is not given on the agreed date, the signature is denied. The only way to make up for the lost presentation points is to write a 30-page (~12,000 words) essay on the same topic, discussing the same issues as it was required in the presentation. The essay is declined if any plagiarism is detected.

Deadline for the essay: 15/05/2021

Points for class participation:

- at least 3 occasions: 1 point
- at least 5 occasions: 2 points
- at least 7 occasions: 3 points

Completion requirements and evaluation criteria for seminar grades and exams: you may only take the exam if you obtained a signature from the course

Oral/written exams, or specific methods/practices applied during the course:

Students have the option to write a midterm exam (see the syllabus about the exact date), or they can write the final exam during the exam period. The midterm and the final exam have the exact same structure, it includes 15 multiple choice questions (each correct answer is worth 1 point) focusing on key definitions, examples, logical exercises. The time available for the test is 20 minutes.

The final grade is calculated as follows:

- Class participation (max. 3 points)
- Presentation (max. 12 points)
- Midterm or final test (max. 15 points)

The point structure is the following: 30-24 excellent; 23-21 good; 20-18 satisfactory; 17-15 pass; 14-0 fail.

For Erasmus students the following ECTS grading scale will be used: 30-27 excellent – A; 26-24 very good – B; 23-21 good – C; 20-18 satisfactory – D; 17-15 pass – E; 14-0 fail – F

**Required reading:**

Most of the materials & more are available in the elearning system: <https://elearning.uni-miskolc.hu/zart/>

Lecture notes: <http://gtk.uni-miskolc.hu/gei/netecon>

Bartha, Zoltán: Network Economics.

Carl Shapiro – Hal R. Varian: Information Rules. Harvard Business Review Press, 1998. ISBN-13: 978-0875848631

**Suggested reading:**

MIT Initiative on the Digital Economy: <http://ide.mit.edu/publications>

Anna Nagurney: Network Economics.

[http://supernet.isenberg.umass.edu/Austria\\_Lectures/fintros1.pdf](http://supernet.isenberg.umass.edu/Austria_Lectures/fintros1.pdf)

Kranton: Reciprocal Exchange.

<http://public.econ.duke.edu/~rek8/reciprocalexchange.pdf>

Andrew McAfee and Erik Brynjolfsson: The Second Machine Age. W. W. Norton & Company, 2014. ISBN 978-0-393-35064-7

Nick Bostrom: Superintelligence: Paths, Dangers, Strategies. Oxford University Press, 2014. ISBN-13: 978-1501227745

Miskolc, 04 February 2021