

Course Title	:	The Economics of the Digital Economy
Course Code	:	ECO3002
Recommended Study Year	:	NIL
No. of Credits/Term	:	3
Mode of Tuition	:	Lecture-Tutorial
Class Contact Hours	:	2-hour lecture per week 1-hour tutorial per week
Category	:	Concentration requirement/Major elective in ECON/SPPS/IEP/GEB
Discipline	:	Economics, SPPS, IEP & GEB
Prerequisite(s)	:	ECO2101 Introduction to Economics
Co-requisite(s)	:	N/A
Exclusion(s)	:	N/A
Exemption Requirement(s)	:	N/A

Brief Course Description

The growing presence of information and digital technology in our economy has created unprecedented opportunities and challenges. Whether we examine our daily lives as consumers or the operations of large companies, we cannot escape the influence of the digital economy. This course will survey the intersection of digital technology and the economy.

Aims

This course will introduce students to the economics of markets where buyers or sellers rely on digital products and/or platforms. Students will focus on particular aspects of conventional economic theories used by digital firms (e.g., auctions) as well as the need to re-examine economic theories for markets where “big data” informs the decisions of consumers and producers.

Learning Outcomes

1. Discuss the economic theories commonly used by digitally-focused corporations.
2. Analyse the motivation for and the consumer reactions to the deployment of digital products by corporations.
3. Apply theories to popular press and academic work analysing the digital economy.

Indicative Content

Price setting, market design, and competition

Data and machine learning

User interfaces and algorithms

Centralization

Ethics, humanity and technology

Digital infrastructure

Social choice and technology

Advertising

“Uberfication” and the sharing economy

The macroeconomic perspective

Finance and technology: “fintech”

Employment, workforce, and access

Teaching Method

Lecture and tutorial

Measurement of Learning Outcomes

Lecture and tutorials (attendance and participation) will ensure that students can present and analyze feedback orally and respond to questions from the instructor, especially regarding the application of theory to real-world observation. The attendance will make sure the students are up-to-date with the teaching material. In the tutorial, the students will present their topics for the final report and get feedback from the instructor and other students. Participation bonus will ensure that students contribute to the class discussion and get involved in the idea exchange. It will also keep up-to-date with lecture material as it is presented. (LO 1-2)

The news portfolio will ensure that students stay up-to-date with real-world developments in the digital economy and that students can express themselves clearly in writing. (LO 1-3)

The midterm exam will be take-home. It will ensure that the students can understand and discuss the basic economic theories with regard to the digital economy and their applications.

(LO 1-3)

The final report will ensure that students synthesize and discuss a wide scope of information after having spent weeks analyzing the information. (LO 1-3)

Assessment

Lecture and tutorials:	20% (attendance 10%, participation bonus 10%)
News portfolio:	20%
Midterm exam:	20%
Final report:	40%

The students will maintain a portfolio of news stories concerning the topics covered in the lecture. Each week, beginning approximately the 2nd or 3rd week of class (to be confirmed later), students will submit a news article published within the 5 years that talks about the economic concept currently being discussed in the lecture. Students must summarize the article (no more than 1 page) and write a commentary (no more than 1 page) about how the article demonstrates an aspect of the digital economy covered in class. The article need not be in English, though in that case students must provide a longer and more detailed summary in order to ensure that the instructor understands the article. The instructor will discuss the news portfolio and give feedback and comments.

In the final report, the students need to select one topic covered in the lecture, for instance, Fintech. The final report must consist of two parts. The first part is the detailed and updated literature in this research area covering the most updated academic papers and industry reports. The students need to discuss the research questions raised by the scholars and what are the conclusions. The second part contains an open discussion from the student's own perspective. The students need to project the future development of the given phenomenon, the potential issues at hand and associated solutions.

In the midterm, the students will answer an open question relevant to the content of the class and more broadly related to the other fields of the general economy. The students need to show their economic sense and understanding of the digital economy using what they learn in the class.

During the tutorial, the students need to present a topic of their final report. The presentation will not be graded. But the students need to get comments and feedback and incorporate them

into the report for improvement.

Assessment Rubrics for the News Portfolio (20%)

Dimensions	Excellent A-, A	Good B- to B+	Fair C- to C+	Pass D, D+	Failure F
Relevance (5%)	Highly relevant to the topics discussed in the class	Largely relevant to the topics discussed in the class	Moderately relevant to the topics discussed in the class	Barely relevant to the topics discussed in the class	Irrelevant to the topics discussed in the class
Language Quality (5%)	Very clear summary with concise and accurate expressions	Clear summary with minor grammar errors	Understandable summary with easily detected grammar errors	Vague summary with major grammar errors	Very unclear summary with serious grammar errors
Demonstration (5%)	Perfectly demonstrate the economics behind the news	Reasonably demonstrate the economics behind the news	Moderately demonstrate the economics behind the news	Barely demonstrate the economics behind the news	Poorly demonstrate the economics behind the news
Quantity (5%)	Submit the news story for each week on time	Miss 1-2 news stories	Miss 3-4 news stories	Miss 5-6 news stories	Miss 7+ news stories

Assessment Rubrics for the Midterm (20%)

Dimensions	Excellent A-, A	Good B- to B+	Fair C- to C+	Pass D, D+	Failure F
Economic Sense and Understanding of the Digital Economy (12%)	Demonstrate perfect economic sense and deep understanding of the digital economy	Demonstrate fair economic sense and good understanding of the digital economy	Demonstrate basic economic sense and some understanding of the digital economy	Demonstrate basic economic sense but lack understanding of the digital economy, or vice versa	Hardly show any economic sense or understanding of the digital economy
Language Quality	Very clear and accurate	Clear expression	Understandable expression	Vague expression	Very unclear expression

(8%)	expression with no grammar mistakes	with minor grammar mistakes	with easily detected grammar mistakes	with major grammar mistakes	with serious grammar mistakes
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Rubrics for the Final Report (40%)

Dimensions	Excellent A-, A	Good B- to B+	Fair C- to C+	Pass D, D+	Failure F
Relevance (10%)	Highly relevant to the topics discussed in the class	Largely relevant to the topics discussed in the class	Moderately relevant to the topics discussed in the class	Barely relevant to the topics discussed in the class	Irrelevant to the topics discussed in the class
Literature Review (10%)	Detailed and updated survey of past literature with discussions of the research questions and conclusions	Survey of most representative literature with discussions of the research questions and conclusions	Survey of relevant literature with some discussions	Survey of only a few articles with little discussion	Lack literature review
Discussion (10%)	Very detailed and insightful discussion of the current and future development of the phenomenon	Reasonable discussion of the current and future development of the phenomenon	Acceptable discussion of the current and future development of the phenomenon	Lack discussion of either the current or the future development of the phenomenon	No discussion from the personal perspective
Language Quality (10%)	Very clear and accurate expression with no grammar mistakes	Clear expression with minor grammar mistakes	Understandable expression with easily detected grammar mistakes	Vague expression with major grammar mistakes	Very unclear expression with serious grammar mistakes

Rubrics for Attendance and Participation (20%)

Dimensions	Excellent A-, A	Good B- to B+	Fair C- to C+	Pass D, D+	Failure F
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Attendance (10%)	No absence without appropriate reason	1-2 absences without appropriate reason	3-4 absences without appropriate reason	5-6 absences without appropriate reason	7+ absences without appropriate reason
Participation (10%)	Frequently raises excellent questions and/or eagerly responds to questions	Often raises excellent questions and/or eagerly responds to questions	Occasionally raise questions and/or responds to questions	Rarely raises questions or responds to questions	Never raises questions or responds to questions

Required/Essential Readings

Essential readings will include selections from the following:

Brynjolfsson, E., & Kahin, B. (2000). *Understanding the digital economy: Data, tools, and research*. Cambridge, Mass.: MIT Press

Economides, N. (1996), "The economics of networks". *International Journal of Industrial Organization*, Vol. 14, N. 6, pp 670-699.

Foray, D., (2004). *Economics of knowledge*. Cambridge, Mass.: MIT Press.

Goldfarb, A., & Tucker, C. (2019). Digital economics. *Journal of Economic Literature*, 57(1), 3-43.

Lanier, J. (2014). *Who owns the future?* (Simon & Schuster trade paperback ed.).

Molho, I. (1997), *The Economics of Information*. Oxford: Blackwell.

Roth, A. (2015). *Who gets what--and why: The new economics of matchmaking and market design*. Boston: Houghton Mifflin Harcourt.

Shapiro, C., Varian, H., (1999). *Information rules a strategic guide to the network economy*. Boston, Mass.: Harvard Business School Press.

Sundararajan, A. (2016). *The sharing economy: The end of employment and the rise of crowd-based capitalism*. Cambridge, Massachusetts: The MIT Press

Important Notes:

- (1) Students are expected to spend a total of 9 hours (i.e. 3 hours of class contact and 6 hours of personal study) per week to achieve the course learning outcomes.
- (2) Students shall be aware of the University regulations about dishonest practice in course work, tests and examinations, and the possible consequences as stipulated in the Regulations Governing University Examinations. In particular, plagiarism, being a kind of dishonest practice, is “the presentation of another person’s work without proper acknowledgment of the source, including exact phrases, or summarised ideas, or even footnotes/citations, whether protected by copyright or not, as the student’s own work”. Students are required to strictly follow university regulations governing academic integrity and honesty.
- (3) Students are required to submit writing assignment(s) using Turnitin.
- (4) To enhance students’ understanding of plagiarism, a mini-course “Online Tutorial on Plagiarism Awareness” is available on <https://pla.ln.edu.hk/>.
- (5) Students are required to fill in a mid-term survey and the end-of-course CTLE survey.