

## UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

#### **SYLLABUS DEL CORSO**

### **Digital Economy**

2021-2-F9101Q018-F9101Q019M

# Aims

#### **Contents**

- The economic and technological factors that are at the heart of the digital revolution taking place in the economy;
- Examining the nature of information as an asset, and defining the laws that govern its behavior as an economic good;
- The clash between existing business models and new digitally enhanced and led business models emphasizing platforms and ecosystems;
- The competitive interactions among firms with different digital business models;
- How the new digital ecosystems are shaping up;
- How to best organize and lead product and service innovation initiatives in the digital space and how to leverage on what you learnt to be successful in the professional world.

#### **Detailed program**

## 01/03/2021 (09.00–11.00)

**Course Introduction** 

Prof. Roberto Masiero & Camilla Bellini

9.00 – 9.30 Course Presentation, Methodology, Projects, Assessment

9.30 – 11.00 Lectio Magistralis Prof. Carlo Alberto Carnevale Maffè: "Data is the new wealth - Economia e management dell'intelligenza ibrida"

03/03/2021 (11.30-13.30)

Lecture 1 – The Basics of (Digital) Economy (asynchronous lecture)

Prof. Roberto Masiero

- What is an investment?
- The balance sheets
- Tangible & Intangible Assets
- Current & Fixed Assets
- The Goodwill
- Case Studies

08/03/2021 (08.30-11.30)

Lecture 2 – Managing information as a strategic business asset (part 1)

Prof. Roberto Masiero

- Measuring the value of Information: an asset valuation approach
- Moody & Walsh "7 Laws" governing the behaviour of the information as an economic good
- Max Boisot

- Varian & Shapiro
- Jeremy Rifkin

#### 10/03/2021 (11.30-13.30)

#### Lecture 3- The Intangible Economy (Part 1)

Prof. Roberto Masiero

- The emergence of the intangible economy
- How to measure intangible investments
- The four S's of intangibles
- Scalability
- Sunkenness
- Spillovers
- Synergies

#### 15/03/2021 (8.30-10.30)

#### **Lecture 4– The Intangible Economy (Part2)**

Prof. Roberto Masiero

- Intangible assets and secular stagnation
- Intangible and the rise of inequality
- Intangible infrastructures
- Financing an intangible economy
- Managing and investing intangibles

#### 17/03/2021 (11.30-13.30)

#### Lecture 5 – The Platform Economy (part 1)

Camilla Bellini

- Platforms Business models: Two basic Types
- Platforms key components
- Platforms and network effects (direct and indirect network effects)
- Platforms vs pipelines

#### 22/03/2021 (08.30-10.30)

#### Lecture 6 – The Platform Economy (part 2)

Camilla Bellini

- Architecture: Designing a successful platform
- Monetizing the network effects
- Factors affecting platforms
- The future of platform Revolution

#### 24/03/2021 (11.30-13.30)

#### Lecture 7 - Digital Platforms and new ecosystems. The Sharing Economy

Prof. Roberto Masiero & Camilla Bellini

- Digital Platforms and new Ecosystems
- Building new digital Ecosystems
- The Sharing Economy

#### **FUNDAMENTALS OF BUSINESS PLANNING (3 LECTURES)**

29/03/2021 (08.30–10.30)

#### Lecture 8 - Designing innovative business with Business Model Canvas

Prof. Roberto Masiero & Matteo Fusco, Founder & CEO – Beople

- What is a business model?
- The Business Model Canvas (BMC)
- Mapping the BMC
- Methodology for building a BMC
- Case Studies

#### 31/03/2021 (11.30-13.30)

#### Lecture 9 - Foundations of a sound business plan for the digital market

Prof. Roberto Masiero

- Revenue models
- Business KPIs
- The main mistakes to avoid

07/04/2021 (11.30-13.30)

#### **Lecture 9 - Digital Innovation Canvas**

Prof. Roberto Masiero & Camilla Bellini

- Course Recap
- Presentation of Business model innovation projects using the BMC by the Students

#### **Prerequisites**

Teaching form
nava wan'i anchahan anawal-aka wana undahal
come al deriva de alarque polone se del de la del francisco experimentally.

#### Textbook and teaching resource

#### Reference Readings

- Jonathan Haskel and Stian Westlake Capitalism without Capital The Rise of the Intangible Economy. Princeton University Press, 2018
- Hal R. Varian, Josef Farrel, Carl Shapiro, "The Economics of Information Technology. An Introduction" (Raffaele Mattioli Lectures), Cambridge University Press, 2005
- Daniel Moody & Peter Walsh, "Measuring the value of Information: an asset valuation approach", ECIS 99, Copenhagen 1999 (available at https://bit.ly/29JucLO)
- Geoffrey G. Parker, Marshall W. Van Alstyne and Sangeet Paul Chodary, "Platform Revolution", W.W. Norton & Company Inc, New York, 2016
- Viktor Mayer-Schonenberg and Thomas Ramge, "Reinventing capitalism in the age of Big Data", John Murray Publishers, London 2018
- Eric A. Posner, E. Glen Weyl, "Radical Markets: Uprooting Capitalism and Democracy for a just society", Princeton University Press, 2018
- Alfonso Fuggetta, "La costruzione degli ecosistemi digitali", in "Digital Italy, Rapporto Annuale 2017", Maggioli Editore, 2017, pag. 194-199

#### Semester

Second Semester

#### **Assessment method**

Written Exam (if allowed by the University), or in alternative Oral exam

Furthermore, students may develop an **optional "Taking Home"** project, that will be evaluated from 0 to 3 additional points to the written or oral exam.

Students, in groups of 2/3 people, are expected to deliver the project one week before the exam.

- a Report, written either in English or in Italian, of no more than 5 pages, plus tables and figures
- a Powerpoint presentation

Possible project contents:

- In-depth discussion of one of the themes of the Lectures of the Course
- Discussion of one of the Papers proposed during the Course
- Development of a theme consistent with the contents and the objectives of the course.

An abstract of the Project must be approved in advance by Professor Roberto Masiero

#### Office hours