



Academic Year 2019-2020

Syllabus

Economics of Innovation

CFU 6

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### Course Description

The course explains what innovation mean and how companies are managing the innovation process. The course provides an overview of the basic innovation management frameworks and then focus on the analysis of the business model innovation and on the role of IT systems in driving innovation.

The innovation management concepts are put in practice with the support of Nautilus, an innovation management comprehensive model.

The relevance of IT tools will be tested through a simulation game based on an ERP/SAP.

The focus of this course is on developing pragmatic and action-oriented analytical skills supported by a mix of innovation management standard framework coupled with illustrative cases and managerial tools.

The objectives of the course are:

- to develop an understanding of the innovation management process;
- to understand and apply the analytical tools and lenses used by managers for moving innovation projects throughout the organization into the market;
- to understand how and why innovation decisions are taken;
- to follow an innovation journey through a specific innovation management framework (Nautilus);
- to assess the role of IT systems and evaluate the strategic impact of new technologies.

### Learning Objectives

#### Knowledge and Understanding

Know the basics concepts of innovation management and understand the different elements required in order to successfully implement innovation within organization. Know the role of IT system as driver of innovation and understand the digital transformation process.

#### Applying Knowledge and Understanding

Understand the basics concept of innovation management and follow all the main steps for managing an innovation process through an applied innovation management tool: Nautilus.

#### Making Judgments

Understand how and why the innovation process is managed and apply judgement in the business cases analysis using the Nautilus framework.

Take appropriate decisions in the ERP/SAP simulation game.

#### Communication Skills

Summarize and present an innovation plan

#### Learning Skills

Analysing critically innovation projects and discuss the key steps in their implementation path

#### Teaching Method

Academic classes based on textbook & articles, plus simulations and web materials. Case studies will be discussed for going closer to practice

## Schedule of Topics

Topic 1	Key issues in innovation management process
Topic 2	Develop an innovation strategy framework
Topic 3	Understand Business Model Innovation
Topic 4	Learn from the market and the partners
Topic 5	Build effective implementation mechanisms
Topic 6	Build innovative organization
Topic 7	The role of IT systems
Topic 8	ERP Systems and business processes redesign
Topic 9	The 5 W of Innovation
Topic 10	Nautilus Step 1 and 2: UNDERSTAND Business and DISCOVER Market Opportunities
Topic 11	Nautilus Step 3 and 4: ANALYSE Competition and GENERATE Innovation Strategy
Topic 12	Nautilus Steps 5 and 6: ANIMATE Creativity Process and DEVELOP Innovation Roadmap
Topic 13	Nautilus Steps 7 and 8: DESIGN and TEST the Solution
Topic 14	Nautilus Steps 9 and 10: IMPLEMENT and LAUNCH the Solution
Topic 15	Digital transformation and strategy
Topic 16	Digital transformation tool-kit

Topics 1-8 and 15-16 are taught by Prof. Corrado Cerruti and topics 9-14 are taught by Prof. Emilio Sassone Corsi and Prof. Stephen Trueman

### Textbook and Materials

The reference textbook is: J. Tidd, J. Bessant and K. Pavitt, *Managing Innovation. Integrating Technological, Market and Organizational Change*, John Wiley & Sons Ltd, 2018.

Plus students are required to study the slides and selected readings (available on the course webpage)

### Assessment

The assessment is looking both at the knowledge of the theoretical models and at the capability to use these models to analyse the business cases.

For attending students, the assessment is based on:

- a written test made of six open questions (80% of the final mark): three on the textbook and three questions from the slides and the readings
- the development of the Nautilus framework (20% of the final mark)

For non attending students, the assessment is based on:

- a written test made of six open questions (100% of the final mark) on the textbook and three questions from the readings

### Office hours

On demand – to be booked by e-mail or directly at:

[https://docs.google.com/spreadsheets/d/1sCUxnrIKRhdLN1\\_C-AuuIFPIJMpKRjYrUFia0SBKpCA/edit#gid=0](https://docs.google.com/spreadsheets/d/1sCUxnrIKRhdLN1_C-AuuIFPIJMpKRjYrUFia0SBKpCA/edit#gid=0)

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