## **Economics of Innovation and Innovation Policy**

## Prof. Matteo Lucchese

***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

The course aims to investigate the factors, nature and consequences of the innovative process at the macroeconomic, microeconomic, and business level. It aims to provide students with a systemic reference framework, which can be an element of awareness and autonomy of judgement to operate in the world of national and international companies and institutions.

The course aims to provide students with the basic and specific knowledge of Economics of Innovation and provide them with the tools useful for understanding innovative phenomena and their implications in terms of economic policy and industrial policy.

With reference to knowledge and content acquired, at the end of the course, students will be able to analyse the innovative choices of private and public operators and interpret and set them in the more general economic and institutional context.

With reference to acquired skills, at the end of the course, students will be able to apply and share their above-mentioned knowledge both for defining company innovative strategies and for defining reference framework for effective policies that support innovation.

In order to achieve these objectives, the course will include cognitive (course- specific knowledge and competences) and metacognitive aspects aimed at developing soft skills such as autonomy of judgement, critical thinking skills and communication skills.

***COURSE CONTENT***

The course is divided into six modules:

– Introduction: definitions and nature of technological change; technology in microeconomic theory; input and output of innovation; key indicators for the measurement of innovation; statistical evidence.

– Market structure and innovation: theory and empirical evidence. Innovation and antitrust policies.

– Patents: theoretical models and empirical evidence.

– Models of technology diffusion; National systems of innovation; differences in innovation across sectors.

– Criticism to the economic theories of technological change: the Neo-Schumpeterian approach.

– The evolutionary theory of markets and companies; Schumpeter I vs Schumpeter II; innovation policy in both traditional and evolutionary approaches.

***READING LIST***

Reference text:

F. Malerba (edited by), *Economia dell’Innovazione,* Carocci, Rome, latest edition.

***TEACHING METHOD***

This blended course includes face-to-face activities (50%) and distance activities (50%). Distance activities include video lectures (asynchronous), practical webinars and live feedback (conducted synchronously via web-conference). Lectures are interactive and include framework information, case studies and workshops. Detailed course programme and further study material will be made available online on the dedicated Blackboard platform.

***ASSESSMENT METHOD AND CRITERIA***

1. Ongoing assessment

For students who opt for an ongoing assessment: 50% of the assessment will be based on two tests (a mid-term written test and a group assignment) delivered during the course as per the instructions, content and timelines that will be published in the Blackboard area reserved for students enrolled in the course; 50% of the assessment will be based on a final written test. The final exam may only be taken following a positive assessment on the tests delivered during the course. In order to pass the exam, the final test (to be held on one of the 3 official exam dates following the end of the course) must be passed.

1. Single summative assessment

Those students who opt for a single assessment on the exam official dates will take a written exam with open-ended questions.

***NOTES AND PREREQUISITES***

*Prerequisites:*

A good knowledge of microeconomics is necessary to attend the course. The following manual is recommended as an example source of knowledge:

H.R. Varian, *Microeconomia,* Cafoscarina, Venice, latest edition.