**Economics of Innovation and Innovation Policy**

Prof. Marco Vivarelli

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

The course aims to examine the determinants, nature, and consequences of the innovative process at the macroeconomic, microeconomic, and firm level. The course provides students with a systemic framework that can help them to work with adequate awareness and autonomous judgment in the world of business and national and international institutions.

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

With reference to the knowledge and contents learned, at the end of the course, students will be able to analyse the innovative choices of private and public operators, and to place and interpret them in the most general economic and institutional context.

With reference to the skills acquired, at the end of the course, students will be able to apply and communicate the knowledge described above, both in outlining innovative business strategies and in outlining reference schemes for effective innovation support policies.

In order to help students reach these expected learning outcomes, the course will include both cognitive (referring to specific knowledge and competences related to the course) and meta-cognitive aspects, aimed to develop transversal skills, such as independent judgment, the ability to carry out critical analysis, and communication skills.

***COURSE CONTENT***

The course comprises an introduction and six modules.

– Introduction to the course; preliminary statistical evidence; technology in microeconomic theory.

 – Definition and nature of technological change, input and output of innovation, indicators.

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

– Patents: theoretical models and empirical evidence.

– Models of technological diffusion. National systems of innovation and Pavitt’s taxonomy.

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

– The evolutionary theory of markets and companies; Schumpeter I vs Schumpeter II.

***READING LIST***

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

A detailed syllabus and further study material will be available online on the Blackboard platform.

***TEACHING METHOD***

Blended learning: frontal lectures, video lectures, practical webinars, live feedback.

Furthermore, during the course, students may be invited to attend seminars and lectures held by experts.

***ASSESSMENT METHOD AND CRITERIA***

a) Ongoing progressive assessment

For students who opt for the ongoing assessment: 50% of the assessment will be based on two tests (a class test and a group assignment) submitted during the course as per the modalities, content and timelines published in the Blackboard area reserved for students enrolled in the course; 50% of the assessment will be based on a final written test with open-ended questions. The final test may only be taken following a positive assessment of the tests assigned during the course. In order to pass the exam, the final test (to be held in one of the 3 exam sessions following the end of the course) must be passed.

b) Summative evaluation

Students who opt for a single assessment on official exam dates will sit a written exam with open-ended questions.

***NOTES AND PREREQUISITES***

Prerequisite: in order to take this course, it is necessary to have a good knowledge of microeconomics. The following text is recommended: H. R. Varian, *Microeconomia*, Cafoscarina, Venice, latest edition.

In case the current Covid-19 health emergency does not allow frontal teaching, remote teaching will be carried out following procedures that will be promptly notified to students.

Further information can be found on the lecturer's webpage at http://docenti.unicatt.it/web/searchByName.do?language=ENG or on the Faculty notice board.