



STUDY PROGRAMME

EEIB

ACADEMIC YEAR

2023 - 2024

SEMESTER

1

COURSE TITLE

FINANCING INNOVATION IN EUROPE

COURSE PROFESSOR

Andrea Mina

COURSE ASSISTANT

Colm LAVELLE

NATURE OF COURSE (COMPULSORY, OPTIONAL)

COMPULSORY

LANGUAGE OF INSTRUCTION

English

ECTS CREDITS

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1. **COURSE OBJECTIVE**

The course addresses the economic problem of funding R&D investments and innovation, with a specific focus on the challenges and opportunities of European economies. Why are potentially valuable new ideas not finding enough financial backing to be developed? What kind of investors are most effective in turning science and technology into successful businesses? How do firms make decisions about resourcing innovation? And what is the role of government in supporting innovation?

Innovation is recognised as a fundamental driver of growth, but its financing entails market failures in the production of knowledge, spillover effects, and pervasive information asymmetries in the investment process. A broad range of financing sources underpin innovation, and a rich ecology of private and public institutions interact in the political economy of innovation financing. Against this backdrop, the aims of the course are:

- i. To identify and explain the specific characteristics of investments in R&D and innovation;
- ii. To examine the innovation-finance nexus at the micro-, meso- and macro-level of analysis;
- iii. To identify the different types of capital used to fund innovation, their relative advantages and disadvantages, their trade-offs and complementarities;
- iv. To analyse the functioning of private capital markets for innovative firms;
- v. To explain the most important policy designs in support of innovation and entrepreneurship, and appraise alternative forms of government intervention in this domain.



2. LEARNING OUTCOMES

The course will equip students with the theoretical frameworks, analytical tools and empirical evidence that are necessary to inform strategic decisions on the funding and governance of innovation. The students will learn the main principles behind R&D investment decisions as well as investors' preferences and behaviours. Moreover, they will gain insights into the rationale of government policy instruments designed to address market and system failures in the development and commercialisation of new science and technology.

3. COURSE CONTENTS

1. Foundations (the Economics of Knowledge)
 - i. The public good problem
 - ii. Science vs. Innovation
 - iii. Types of R&D and Types of Innovation
 - iv. Intellectual property rights
 - v. R&D and Innovation indicators
2. The bigger picture
 - i. Funding R&D in Europe (stylized facts, figures and trends)
 - ii. The ecology of innovation financing (types of organisations/types of finance)
3. Science funding and the Entrepreneurial University
4. Firm size, firm growth and innovation
5. Firm capital structure and innovation
6. Entrepreneurial Finance I (VC)
7. Entrepreneurial Finance II (Angels, CVC, Crowdfunding, Government VC)
8. Innovation Intermediaries
9. Sectoral eco-systems, regional clusters and regional innovation policy
10. Government funding and innovation (R&D tax credits, procurement and grants).

NB. The order of the sessions is indicative only and can be subject to change.

4. TEACHING METHOD(S)

The course will be delivered in 10 two-hour long sessions involving formal lectures, group discussion, and questions.

5. COURSE MATERIAL

The course will be accompanied by a full set of exhibits, to be made available by the Academic Assistant. The course reading list (see Annex) contains both texts of general reference as well as more detailed sources that were used as background materials for the preparation of the exhibits. The students will find at the end of each set of slides the required bibliographic references, and optional reading materials.

6. EVALUATION

The course will be evaluated by means of a closed-book exam. The materials of reference for the exam will be the course exhibits and a selection of readings clearly specified in each lecture.



ANNEX – Bibliography

GENERAL REFERENCES

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- Malerba, F. Brusoni, S. (Eds.), 2007, *Perspectives on Innovation*, Cambridge University Press, Cambridge (UK).
- Stoneman, P. (Ed.) *Handbook of the Economics of Innovation and Technical Change*, 1995, Blackwell, Oxford (UK) and Cambridge (MA).

SPECIFIC REFERENCES

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