College of Europe
Collège d'Europe
Brugge Natolin

ECTS CARD

STUDY PROGRAMME	ACADEMIC YEAR	SEMESTER
EUROPEAN ECONOMIC STUDIES	**2025 - 2026**	**2**

COURSE TITLE

FINANCING INNOVATION IN THE EU

COURSE PROFESSOR	COURSE ASSISTANT
ANDREA MINA	**DMYTRO KAZAKOV**

NATURE OF COURSE (COMPULSORY, ELECTIVE)	LANGUAGE OF INSTRUCTION
ELECTIVE	**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 20h 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 **written closed-book exam of 2.5 hours** (counting for 100% of the final grade). The materials of reference for the exam will be the course exhibits and a selection of readings clearly specified in each lecture.

Students who do not pass the course in the first examination session take the exam in the second examination session (resit), which according to the Study Regulations counts for 100% of the final course grade.

7. FURTHER SPECIFICATIONS

In this course, the use of generative artificial intelligence (genAI) is **strictly prohibited** at all stages of the work process on the in-class oral presentations. According to art. 38 of the Study Regulations, prohibited use means that *"all tasks related to an assignment, from planning, conceptualisation to research and writing, must be completed without any support of genAI."*

Failure to respect these rules will be considered academic misconduct and be sanctioned in line with the Study Regulations (Section 4.4.). The use of AI-powered tools for grammar checking or reference management is permitted.

Throughout the whole duration of the exam, all the mobile phones and other electronic devices (except the laptop which you take the exam on) need to be put in silent mode and be kept in your bag. If you want to take and upload pictures to the exam, e.g. graphs, please raise your hand and wait for an explicit authorisation of a supervisor. Any other unauthorised usage and/or possession of phones and/or other electronic devices throughout the entire duration of the exam (inside or outside of a classroom) will be considered as (attempted) cheating and lead to a mark of 0 (under Art. 30b of the Study Regulations).

For the detailed rules on the (digital written) examinations at the College of Europe, please refer to the provisions of the Study Regulations and *Dispositions particulières*. Students are responsible to have read and complied with the applicable rules.

ANNEX – Bibliography

GENERAL REFERENCES

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SPECIFIC REFERENCES

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