



STUDY PROGRAMME

ECO-ELEA + LAW-ELEA

ACADEMIC YEAR

2023 - 2024

SEMESTER

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COURSE TITLE

ECONOMICS OF INNOVATION AND INTELLECTUAL PROPERTY RIGHTS (IPRs)

COURSE PROFESSOR

PROF. DR. BEATRICE DUMONT

COURSE ASSISTANT

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NATURE OF COURSE (COMPULSORY, OPTIONAL)

COMPULSORY

LANGUAGE OF INSTRUCTION

ENGLISH

ECTS CREDITS

3.5

1. COURSE OBJECTIVE

The course aims at:

- analyzing the economics mechanisms and institutions governing the production, use and diffusion of information and knowledge;
- comparing these principles with the new realities of IPRs
- questioning the effectiveness of innovation policies and intellectual property rights: What objectives should they pursue and with what types of instruments?

This course is also designed to familiarize the students with a “middle ground” regarding patents. It moves away from a “traditionalist” conception which, by insisting on the incentivizing role of patents, tends to neglect their informational role, especially as a signal. Without contesting the relative disconnect between the upward demography of patents and the significantly more moderate productivity gains, this course proposes an alternative interpretation to that of the “abolitionists.” It suggests that the position of patents within the system of innovation is renewing itself, with the shift toward a more fragmented, more intermediated innovation that is also more open, which guides the contemporary evolution of the most developed economies.



2. LEARNING OUTCOMES

Upon successful completion of the course, students will possess:

- a sound knowledge of innovation economics & the economics of IPRs;
- a deep understanding of the legal and economic debate on the question whether and why Europe is lagging behind in terms of innovation;
- a critical appreciation of issues related to the interaction between antitrust and IPRs.

3. COURSE CONTENT

Part 1/ Economics of innovation

- **CHAPTER 1: The importance of innovation activities in the economy**
 - 1.1. Why study innovation?
 - 1.2. Definitions
 - 1.3. Questioning
- **CHAPTER 2: Measurement and Monitoring of innovation**
 - 2.1. The macroeconomic approach based on national accounts data
 - 2.2. The micro-economic approach on patent data
 - 2.3. A synthetic approach: the European scoreboard innovation

Part 2/ Economics of IPRs

- **CHAPTER 3: An Introduction to IPRs**
 - 3.1. A primer on IPRs
 - 3.2. IP stats at a glance
 - 3.3. Sum up
- **CHAPTER 4: Patents as an (imperfect) answer to the problem of encouraging innovation**
 - 4.1. The lack of appropriability at the heart of the problem
 - 4.2. A first solution: innovation prizes
 - 4.3. A second solution: patents
 - 4.4. Comparison between innovation prizes and patents
- **CHAPTER 5: Patent delimitation**
 - 5.1. The optimal patent duration/length
 - 5.2. The optimal patent height
 - 5.3. The optimal patent breadth
- **CHAPTER 6: Sequential innovations and IPRS**
 - 6.1. "Standing on the shoulders of giants"
 - 6.2. The rise of hold-ups
 - 6.3. The role of Patent Assertion Entities (PAEs)



- **CHAPTER 7: Competition and patents (*)**

- 7.1. The tragedy of the anti-commons
- 7.2. Patent pools
- 7.3. The “common pool” problem.

- **CHAPTER 8: Competition policy and IPRs**

- 8.1. IP and competition in theory
- 8.2. Standard essential patents (SEPs) and FRAND licenses
- 8.3. The availability of injunctions
- 8.4. Pay-for-delay” settlements

The content of the chapters and the level of modelling will be adapted depending on students' previous knowledge. Due to time constraints, the micro-economic analysis of innovation (e.g. notions linked to Product innovation and differentiation, Innovation and risk-taking & the Financing of innovation) will not be dealt with in the course.

(**) Depending on time & teaching conditions (on-site or remotely), this chapter might not be covered.

4. TEACHING METHOD(S)

Contact hours: 20h

Lectures: The content of the teaching will be both theoretical and empirical. The approach will be mainly based on economic principles and will focus on markets, incentives and strategic interactions. However, some legal aspects will be presented. The form adopted for this course will be deliberately interactive. Students are therefore expected to participate actively in the course and express their views. They may be asked to solve exercises during and in-between classes. The course is designed to challenge and develop analytical skills. Prior reading of the material is essential.

Assignment and in-class presentation:

- Students (in a team of 2) will have to make an oral presentation.
- The composition of each team will be determined by the Academic Assistant in charge of the course;
- Each team will have 2 weeks to prepare for this oral presentation (20 minutes);
- The Professor in charge of the course and fellow students are expected to give feedbacks on the work presented.



5. COURSE MATERIALS

Lecture notes and readings. The readings will be made available through the course web.

Recommended readings:

- Baudry, M. & B. Dumont (2017), *Patents : Prompting or restricting innovation?*, ed. John Wiley & Sons, 274p.
- Bessen, J.E & E. Maurer, (2009), *Patent failure: How judges, bureaucrats and lawyers put innovators at risk*, Princeton University Press, 352p.
- Boldrin, M. & D.K. Levine, (2008), *Against intellectual property*, Cambridge University Press, 312p.

6. EVALUATION

The evaluation will be based on:

- A closed-book write exam, two hours in length, which will take place during the December examination session (75% of the grade).
 - The closed-book exam will consist of three-four questions.
- Assignment & oral presentation (25% of the grade)

For those who have to do their resits in September/October session, the written exam counts 100% of the weight.

The College of Europe reserves the right to change the delivery and assessment of the course in case of restrictions related to the Covid-19n pandemic. Any communication from the Academic service in this regards takes precedence over the information provided in this ECTS card.