



## STUDY PROGRAMME

ECO-ELEA, LAW-ELEA

## ACADEMIC YEAR

2021 - 2022

## SEMESTER

1

## COURSE TITLE

ECONOMICS OF INNOVATION AND INTELLECTUAL PROPERTY RIGHTS (IPRs)

## COURSE PROFESSOR

Prof. Dr. Beatrice DUMONT

## COURSE ASSISTANT

Jeanne MOUTON

## 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?

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

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 be able to

- Gain insight into the legal and economic challenges around innovation, with a particular focus on issues related to patents in Europe;
- Develop a critical understanding of a wide range of issues concerning the legal regulation of intellectual property and the digital economy.

The learning outcomes for this course tie in with the following learning outcomes for the European Economic Studies programme:

- Understand the normative assumptions, implications and limitations of economic theory and economic policy making.
- Use economic theory to assess current problems and policies.
- Integrate their knowledge of related disciplines (particularly EU law) into the domain specific knowledge of economics.
- Use their knowledge of economics, legal principles and political science to analyse problems in law or political science.
- Think innovatively and provide constructive analytical commentary as well as potential recommendations on the evolution of the EU and its possible future development.
- Recognise the importance of empirical foundation for knowledge acquisition and evidence-based policies and use quantitative techniques and other empirical methods to evaluate theoretical knowledge.
- Describe, explain and illustrate the usefulness and limitations of economic theory applied to economic conditions and problems in Europe.
- Recognise, analyse, explain and critique economic developments and economic policies in Europe.

## 3. COURSE CONTENT

### **Part 1/ The 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/ The 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

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

NB: due to time constraints, the micro-economic analysis of innovation (e.g. Product innovation and differentiation, Innovation and risk-taking & the Financing of innovation) will not be dealt with in the course.

## **4. TEACHING METHOD(S)**

The lectures will be complemented by class discussion.

Attendance is warmly recommended!



## 5. COURSE MATERIALS

- Slides available on the ECO intranet
- Optional 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 consist of a written examination (2 hours, closed book, covering all materials). For the grading, the following elements will be taken into account: Expose rigorously (i.e. in a structured way) your own opinion, quote your sources.

For students who do not pass the course in this way, there will be an exam in the second session examinations, which according to the Study Regulations counts for 100 % of the final grade.