

## Innovation policies

**Level:** Master – second year – M2

**Cursus:** Data Science and Management of Innovation / Political Engineering

**Semester:** 1

**Teaching hours:** 18h in class (lectures - CM)

**Teacher:** Corinne Autant-Bernard

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### Abstract:

The course discusses why public intervention is requested when it comes to innovation, how public authorities can intervene and to what extent such actions are effective. The aim is to provide an overview of the various types of innovation policies, including IPR policies, direct and indirect support to private R&D, public research, collaboration and place-based policies and standardisation and demand-based policies. Lectures cover theoretical foundations, temporal and international comparisons and ex-post evaluation.

### Learning objectives:

At the end of the class, students are expected to:

- design appropriate policies to support innovation,
- identify potential adverse effects of each policy instrument,
- suggest an evaluation framework adapted to the objectives and risk of failures of each policy instrument.

### Course contents:

The course is organized in 2 hours of lectures (9 sessions)

Session 1 and 2: Introduction

- 1/ The different types of imperfections in the innovation market and their consequences
- 3/ Multiple responses to these failures
- 4/ Why and how to evaluate?

Session 3 and 4: Intellectual Property Right policies

- 1/ Theoretical foundations
- 2/ Historical perspective
- 3/ Current policy instruments (international comparisons)
- 4/ Risk of failures and ex-post evaluation of these policies

Session 5 and 6: Private R&D support policies

- 1/ Theoretical foundations
- 2/ Historical perspective



- 3/ Current policy instruments (international comparisons)
- 4/ Risk of failures and ex-post evaluation of these policies

#### Session 7: Public research-based policies

- 1/ Theoretical foundations
- 2/ Historical perspective
- 3/ Current policy instruments (international comparisons)
- 4/ Risk of failures and ex-post evaluation of these policies

#### Session 8: Collaboration and place-based policies

- 1/ Theoretical foundations
- 2/ Historical perspective
- 3/ Current policy instruments (international comparisons)
- 4/ Risk of failures and ex-post evaluation of these policies

#### Session 9: Standardisation and demand-based policies

- 1/ Theoretical foundations
- 2/ Historical perspective
- 3/ Current policy instruments (international comparisons)
- 4/ Risk of failures and ex-post evaluation of these policies

#### Assessment Elements: Final written exam

#### Bibliography:

- Edler, J., & Fagerberg, J. (2017). *Innovation policy: what, why, and how*. Oxford Review of Economic Policy, 33(1), 2-23.
- Edler, Cunningham, Gök, Shapira (2016) *Handbook of Innovation Policy Impact*, Edward Elgar
- Sampat, B. N. (2018). A survey of empirical evidence on patents and innovation. *National Bureau of Economic Research Working Paper Series*, (w25383).
- Montmartin, B., & Massard, N. (2015). Is financial support for private R&D always justified? A discussion based on the literature on growth. *Journal of Economic Surveys*, 29(3), 479-505.
- Zúñiga-Vicente, J. Á., Alonso-Borrego, C., Forcadell, F. J., & Galán, J. I. (2014). Assessing the effect of public subsidies on firm R&D investment: a survey. *Journal of Economic Surveys*, 28(1), 36-67.
- OECD (2018). *OECD Science, Technology and Innovation Outlook 2018*. Paris: OECD Publishing.