

MGT-641(c)

Technology and Public Policy - (c) Technology, intellectual property and innovation policy

de Rassenfosse Gaétan, Various lecturers

Cursus	Sem.	Type
EDOC General and external courses		Obl.

Language of teaching	English
Credits	2
Session	
Exam	Term paper
Workload	60h
Hours	28
Courses	28
Number of positions	20

Summary

The class will provide information about what STI support tools exist and why, will explain the rationales and best practices for STI policy intervention and will provide with a sound understanding of why taxpayer money should be used and how to finance STI activities.

Content**Tentative Outline**

1. Introduction [1 hour]
 - a. Motivation
 - b. Definitions
 - c. Group project guidelines
2. Key theoretical concepts [5 hours]
 - a. The Solow residual
 - b. Knowledge as a public good
 - c. Externality
 - d. Market failure
 - e. Paradox of disclosure
 - f. Knowledge spillover
3. Rationales for STI policy [1 hour]
 - a. The neoclassical view
 - b. The innovation system view
4. Principles of a good policy intervention [1 hour]
 - a. A clear “failure” to solve
 - b. No distortion
 - c. Predictability
5. Conducting impact evaluation studies [3 hours]
 - a. Natural experiments
 - b. Matching method
 - c. Difference – in - differences
 - d. Regression discontinuity design
6. What tools exist (and evidence) [5+3+2 hours]

- a. Cluster policies
- b. Public funding of universities and PROs
- c. Grants (universities, companies; individual, collaboration)
- d. R&D subsidies
- e. Tax credits
- f. Patents (external guest: Julio Raffo from WIPO)
- g. Innovation vouchers
- h. Public procurement (external guest: Emilio Raiteri from EPFL)

Note

Target audience

The class is targeted at all EPFL PhD students and post-docs, regardless of whether they want to stay or leave academia/research and regardless of whether they have background training in economic/econometrics. For students who plan to stay in academia/research, the class will provide information about what STI support tools exist and why. For students who plan to leave academia/research to work in policy, the class will explain the rationales and best practices for STI policy intervention. For the other students, the class will provide them with a sound understanding of why taxpayer money should be used – and how – to finance STI activities.

Keywords

Policies for the knowledge economy; Policy evaluation; Science of Science; Intellectual Property; Entrepreneurship.

Resources

Bibliography

Handbook of the Economics of Innovation, Vols. 1&2 (ISBN : 9780444519955);
The Science of Science Policy: A handbook (ISBN: 9780804770781)

Ressources en bibliothèque

- [The science of science policy / Husbands](#)
- [Handbook of the Economics of Innovation vol.2](#)
- [Handbook of the Economics of Innovation vol.1](#)

Websites

- <https://www.innovationpolicyplatform.org/>