Course Description MEDD8919 Science and Higher Education Systems and Policy

Course description

The course discusses the overlaps and relations between the science and technology system and the higher education system using the public policy process as an analytical tool to engage with both systems. The engagement between both systems is done using a mix of perspectives that are anchored on relevant issues and related policy. In doing this, the objectives and characteristics of both systems are considered on how policy is shaped to adapt to an often-negotiated purpose that serves national interests or to face global competitiveness. To better understand this process, specific aspects and activities that overlap the two systems are particularly focused on such as the incentives for the creation, protection and dissemination of knowledge creation, the dynamics of knowledge creation, knowledge impact and assessment, training of the scientific and non-scientific labor force, and sustainability of scientific and higher education structures.

Coursework / Examination ratio:	100	_% Coursework,	0	% Examination
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Course objectives

The course aims to give the students a better understanding of the differences, characteristics, and articulation between the science and technology system and the higher education system. The course provides this understanding through a lens that also allow the students to better understand the public policy process that creates policies that affect both systems.

Course learning outcomes		Aligned programme learning outcomes (PLOs)
1.	An understanding of science and technology and higher education	PLOs 1, 2, 3
	systems	
2.	Identify issues that influence the design of public policies shaping	PLOs 1, 2, 3
	higher education and science and technology	
3.	Analyze overlapping issues that can contribute to develop more	PLOs 1-5
	effective, resilient and impactful science, technology and higher	
	education systems	

Course assessment methods

Assessment method	Type of assessment (e.g. description of assignment)	Weighting (%)	Aligned course learning outcome(s)
Moodle Tasks	Individual	40	CLOs 1, 2, 3
Group assignment	Group	30	CLOs 1, 2, 3
(technical working groups)			
Discussion of group	Group	30	CLOs 1, 2, 3
assignment (technical			
working groups)			

Course content and topics

The Science and technology system

The higher education system

Knowledge and economic growth

Knowledge creation and its incentives

Knowledge dissemination and its incentives

Knowledge transfer, exchange, and impact

Training of the scientific workforce

Assessment, evaluation

Public policy and the public policy process

Required / recommended readings and online materials

- Horta, H. (2022) Trust and incentives in academic research and the position of universities within innovation systems. *Higher Education* 84 (6), 1343-1363
- Civera, A., Lehmann, E.E., Paleari, S., and Stockinger, S.A.E. (2020) Higher education policy: why hope for quality when rewarding quantity? *Research Policy* 49(8): 104083
- Hazelkorn, E., and Gibson, A. (2018) Public goods and public policy: what is public good, and who and what decides? *Higher Education* 78: 257-271.
- Shot, J. and Steinmuller, W.E. (2018) Three frames for innovation policy: R&D, systems of innovation and transformative change. *Research Policy* 47(9): 1554-1567.
- Benjamin, R. (2015). The Emperor's New Genes: Science, Public Policy, and the Allure of Objectivity. *The ANNALS of the American Academy of Political and Social Science* 661(1): 130–142.

Other additional course information

Nil