SYLLABUS

Name of the course:	Innovation Economics						
Teacher:	Cristiano ANTONELLI						
University / organisation:	Università di Torino						
Language of teaching:	English						
ECTS:							
Semester (S1, S2, S3 or S4):	☐X	S1		S2		S3	S4
Teaching method(s):	☐☑	Lecture courses			☐☑	Flipped classroom	
	Other:						
Type(s) of evaluation:	☐	Sitting exam			☐☑	Written report	
	☐☑	Oral defence			☐☑	Group project	
	Other / comments:						
Expected deadline(s) for the evaluation(s)	Mid December						
Expected date of final results:	July 2025						
Summary of the content:	UNDERSTANDING THE DYNAMICS OF ENDOGENOUS TECHNOLOGICAL CHANGE AND THE ROLE OF AGENTS, MARKETS AND INSTITUTIONS						
Indicative list of lectures:	1. Introduction on terminology. 2. The endogeneity of innovation. Layers: the endogeneity of science, the endogeneity of technology; the endogeneity of innovation. Levels: weak endogeneity vs. strong endogeneity. 3. The discovery of the residual. Total factor productivity. 4. Tobin's q: definition and debates. 5. Adam Smith, Nicholas Kaldor, Jacob Schmookler and the demand pull approach. 6. Karl Marx, John Hicks and Daron Acemoglu: three steps of the induced technological change approach. 7. Schumpeter 1911 (1934): From Walras to entrepreneurship. 8. Schumpeter 1928: The Marshallian legacy. 9. Schumpeter 1942: The corporation, oligopolistic rivalry and the product life cycle. From Cournot to Scherer. 10. The dynamics of learning and its implications: Localized technological change. 11. The Arrovian economics of knowledge: the implications of the limited appropriability. The market failure hypothesis. 12. The economics of intellectual property rights. 13. The economics of university.						

	14. R&D subsidies and the additionality problem. 15. Early evolutionary economics: Routines and the Fisher-Price Law. 16. Spillover economics. New growth theory. 17. The limited transferability of knowledge: absorption costs and the governance of technological knowledge: technical versus pecuniary externalities. 18. The size and composition of external knowledge: Jacobs increasing returns. 19. The technology production function and the knowledge generation function: the CDM approach. 20. The limited exhaustibility of knowledge and the recombination hypothesis. 21. Schumpeter 1947: The creative response. 22. Bounded rationality and Lamarckian evolutionary economics. 23. History matters: trajectories, past dependence and path dependence. 24. The complexity approach: innovation as an emergent system property. 25. From the economics of knowledge to the knowledge economy. 26. Technological change and international trade. 27. Technological change and inequality: A two-way relationship? 28. Technological congruence. 29. Technological platforms.
Short bibliography:	Antonelli, C. (2017), "Endogenous Innovation: The Economics of an Emergent System", 2017, Cheltenham, Edward Elgar; Antonelli, C. (2018), "The Evolutionary Complexity of Endogenous Innovation. The Engines of the Creative Response", Cheltenham, Edward Elgar; Antonelli, C. (2019), "The Knowledge Growth Regime: A Schumpeterian Approach", Palgrave MacMillan, London (ISBN: 978-3-030-05507-3);