Transversal Activities 2024-2025

Course:	**INNOVATION CAMP**
Teacher:	Prof. MAURO FASANO, Prof.ssa ALESSIA PISONI, Prof. ANDREA VEZZULLI
Length:	4.5 CFU (36 hours)
Objective:	According to EU Council, entrepreneurship is one of the eight Key Competences for Lifelong learning. Innovation Camp for PhD Students is a course dedicated to the dissemination of entrepreneurship and innovation concepts among PhD students and to the development of the related hard and soft skills. It begins from the milestones of the lean startup approach up to the development of an innovative idea. At the end of the course an open badge will be issued to all participants who attended both the open day and at least 75% of the remaining proposed activities.
Course Topics:	Open day: Research potential, entrepreneurship, and technology transfer (4 h) • Research social and economic impact • Technology transfer tools provided from the Atheneum Introduction to startup world (4 h) • The start-up world: fundamental tools • Market analysis Legal aspects (4 h) • IP protection strategies • Legal issues of startups The Lean Startup with hands-on (4 h) • The Lean Startup approach • Value Proposition and Business Model Canvas Funding and supporting the idea (4 h) • The capital raising process • EU opportunities for startups • Focus on alternative finance and on the role of business angels Communication of the idea (4 h) • Pitch structure • Soft skills for pitching Team working & mentoring activities (4 h) • The importance of the team • How to work efficiently in a team • Mentoring activities Pitch refinement session (4 h) Final presentation of business ideas (4 h)

Course:	**INTRODUCTION TO SYSTEMS BIOLOGY**
Teacher:	Prof. MAURO FASANO organized by the PhD Course in Experimental and Translational Medicine
Length:	1.5 CFU (12 hours)
Description:	*Objective*: The course is a primer to work with large datasets (big data or wide data) that suffer from dimensionality and sparsity. After describing common strategies for feature selection and extraction, students will learn how to obtain functional information from extracted features. Moreover, foundations of graph theory and network science will be described and discussed.

Course:	**SAFETY IN THE LABORATORY**
Teacher:	Prof. CARLO LUCARELLI, Prof. STEFANO FANETTI, TBD
Year:	**1**
Length:	14 hours
Description:	Legal aspects. Working with videoterminals. Working with chemicals. Working with lasers and radioactive sources. Biohazard.

Course:	**ARTIFICIAL INTELLIGENCE**
Teacher:	Ref. MAURO FASANO
Year:	**Any**
Length:	8 hours
Description:	Foundations of AI. The AI act. Applications (Biology, Surgery, Medicine, Economics, Humanities, Astrophysics, Materials science).

Course:	**RESEARCH INTEGRITY**
Teacher:	Ref. MARCO COSENTINO
Year:	**Any**

Length:	12 hours
Description:	The course aims to promote knowledge of the principles and standards defined in the European Code of Conduct for Research Integrity (https://allea.org/wp-content/uploads/2023/06/European-Code-of-Conduct-Revised-Edition-2023.pdf), providing essential tools for their application in various contexts where scientific research is conducted. It takes into account the roles of the different figures involved in various capacities, their tasks and responsibilities, as well as the pressures each may face from time to time. The code applies to all scientific and humanities disciplines and promotes the importance of honesty and collaboration in the research process. The research community has the responsibility to formulate principles, ensure the quality and integrity of research, and actively respond to situations where forms of scientific misconduct occur. The code aims to strengthen this responsibility and provide tools to prevent and – if necessary – recognize and manage violations of research integrity.

Course:	**ACADEMIC WRITING AND PUBLISHING**
Teacher:	Ref. ANDREA VEZZULLI
Year:	**Any**
Length:	8 hours
Description:	By the end of the course, students should be able to: craft texts in different genres (e.g., summary, problem statement, annotations, etc.); produce an original academic research paper in your field of studies; practice analysis in written form through synthesis of academic papers; provide constructive feedback to peers on their written work, and address issues identified by the instructor and peers when revising one's own written work.

Course:	**PERSONAL BRANDING**
Teacher:	TLC
Year:	**Any**
Length:	12 hours

Description:	At the end of the course, the participant will be able to effectively manage their presence on social media by creating high-quality content and will know how to communicate in an official capacity to best promote themselves on their personal and professional channels.

Course:	**PUBLIC SPEAKING**
Teacher:	TLC
Year:	**Any**
Length:	8 hours
Description:	The course introduces important elements of successful presentations including effective listening, presentation organization, and logical structure; informative and persuasive speech; use of visual aids, research, and evidence; ethical considerations; and techniques for building confidence in public speaking.
	Objectives: to increase confidence and poise when speaking to audiences or groups; to expand student's abilities with computer mediated communication in order to better prepare them for future presentations online; to enrich students' ability to master all components that make a speech successful: understanding timing, figuring out how much practice is needed, ensuring deliverables are clear, and being able to meet deadlines.

Course:	**PROJECT MANAGEMENT**
Teacher:	TLC
Year:	**Any**
Length:	8 hours
Description:	How to start, define and organize a project; how to develop a project plan, including scoping, sequencing tasks, and determining the critical path; how to assess, prioritize and manage project risk; how to execute projects and use the earned value approach to monitor and control progress.