Master in Life Sciences

A cooperation between BFH, FHNW, HES-SO, ZFH

Module title	Innovation and Project Management
Code	B3
Degree Programme	Master of Science in Life Sciences
Workload	3 ECTS (90 student working hours)
	- Asynchronous and synchronous centralized distance learning: 21 h
	- Decentralized local teaching: 11 h
	- Assignments: 32 h
	- Self-study: 26 h
Module	Name: Dr. Robert Vorburger
Coordinator	Phone: +41 58 934 54 72
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	Address: ZHAW Life Sciences und Facility Management, Schloss 1, 8820 Wädenswil
Lecturers	Dr. Robert Vorburger, ZHAW
Entry requirements	Module B1 "Business Administration for Life Sciences" recommended
	Module B2 "Management and Leadership for Life Sciences" recommended
Learning outcomes	After completing the module, students will be able to:
and competences	differentiate between creativity, invention, and innovation
	 understand the role of innovation management within a company
	apply internationally approved project management methodologies
	apply internationally approved requirements engineering techniques
	understand the role of quality management
	• include patent law and intellectual property rules in new business opportunities.
Module contents	• Creativity Techniques: Different methods to encourage creativity, including techniques
	for idea generation and divergent thinking
	• Innovation Management: How to shape a creative idea into a product or business
	model. The role of innovation management within a company
	Requirements Engineering: Identify and specify the needs as soon and as exact as
	possible. General techniques of requirement engineering such as phrasing,
	categorising, and tracing of requirements
	Project Management: Internationally approved sequential as well as agile project
	management methodologies, e.g., waterfall model and SCRUM, respectively.
	Quality Management: International standards, validation and verification, common
	ground with risk management
Teaching / learning	A project builds the core of the module. The mission is to develop and manage a product or
methods	a service.
	During the centralized teaching lessons, techniques, methods, and concepts are presented
	and discussed. Additional material for self-study will be provided to build a deeper
	understanding of the topics.
	In line with the topics covered in the centralized lessons, a project is implemented in the
	decentralized lessons. The students work together in small groups. In a first phase, the
	students will apply innovation techniques to come up with a product/service idea and will
	compile a business model canvas around the product/service. In the second phase, project

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	management techniques will be applied to plan the development and production of the product. The role of the teacher shifts in the decentralized local lessons from a lecturer to a coach.
Assessment of	1. Final written exam, closed book (on methodologies) (80%)
learning outcome	2. Three group assignments during the module in the decentralized teaching; to be handed in within 2 weeks each (20%)
Format	7-weeks
Timing of the	For ZHAW and FHNW: Spring semester, CW 15-21
module	For BFH and HES-SO: Autumn semester, CW 45-51
Venue	centralized teaching online / decentralized teaching at respective school
Bibliography	Project Management Handbook Kuster, J., Huber, E., Lippmann, R., Schmid, A., Schneider, E., Witschi, U., Wüst, R Springer-Verlag, 2015 The Art of Innovation: Lessons in Creativity from IDEO, America's Leading Design Firm Kelly Tom, Crown Publishing Group, 2007
Language	English
Links to other modules	
Comments	Material treated during decentralized teaching is relevant for the exam.
Last Update	31.03.2025