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 distance learning, decentralized teaching: 32 h - Self-study: 58 h (10 h self-study before module starts)
Module Coordinator	**Name**: Dr. Robert Vorburger **Phone**: +41 58 934 54 72 **Email**: robert.vorburger@zhaw.ch **Address**: ZHAW Life Sciences und Facility Management, Schloss 1, 8820 Wädenswil
Lecturers	Dr. Robert Vorburger, ZHAW
Entry requirements	-
Learning outcomes and competences	After completing the module, students will be able to: • 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 methods	A project builds the core of the module. The mission is to develop and manage a product or 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 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 learning outcome	1. Final written exam, closed book (on methodologies) (80%) 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 module	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	06.03.2026