Valid from 2024.HS

Module description: Laboratory and Hospital Pharmacy

Module Code	t.BA.MI.LASP.23HS
ECTS Credits	4
Language of Instruction/Examination	German
Organizational Unit	ICP
Module Coordinator	Mathias Bonmarin
Legal Framework	The module description is part of the legal basis in addition to the general academic regulations. It is binding. During the first week of the semester a written and communicated supplement can specify the module description in more detail.
Module Characteristic	Type 3a 2 lecture lessons per semester week and class+ 2 lab bi-weekly lessons per semester and half-class
Module Description	In this module the students will learn about the functioning of a hospital laboratory, a sterilization unit and a hospital pharmacy. Focus will be about the infrastructure and tracing systems but a general overview will be given.
Module Content	• At the end of this module, students will gain a comprehensive understanding of three critical areas of medical informatics that are significant for professionals in hospitals or large clinical environment. • They will gain profound insights into the operational dynamics of a diagnostic laboratory department in a hospital or clinic. This includes an understanding of various tests, the handling of biological samples, as well as the generation, processing, and seamless integration of the resulting data into the continuum of care. • Furthermore, the students will acquire comprehensive knowledge about various sterilization procedures used in both medical facilities and industrial contexts, such as implant production. This will involve an in-depth examination of the fundamental principles of sterilization, including physical, chemical, and biological dimensions. The module will also highlight the generation and integration of data from these processes into the broader healthcare system. • Ultimately, the curriculum will include an in-depth exploration of the operation of hospital pharmacies. This encompasses an explanation of different drug categories, common classification systems, and the generation and processing of relevant data. These insights will be seamlessly integrated into the overarching healthcare network.
Prerequisite Knowledge	None

Learning Objectives (Competences)

Students...	Competencies	Taxonomies
Engaging collaboratively in teams, the students adeptly tackle real-world, application-centric challenges. Their problem-solving endeavors culminate in the synthesis of their findings, effectively presented within a comprehensive report.	M, SO	K2, K3, K4, K5
The students possess a comprehensive understanding of the fundamental physical, chemical, and biological principles underpinning laboratory diagnostics, sterilization techniques, and hospital pharmacy operations. They exhibit familiarity with the primary processes involved, the resultant data generated, and the associated software interfaces.	F	K2

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Performance Assessment

End-of-module exam	Assessment	Length (min.)	Weighting	Form
written exam	Grade	90	80	acc. to module agreement

Performance assessment during the semester	Assessment	Length (min.)	Weighting	Form
report	predicate	90	20	acc. to module agreement

Classroom Attendance Requirement

None

Presence is compulsory during seminars

Learning material

Comments

None