

Module title		Abbreviation
Practical Course in Molecular Microbiology		03-98-PMoMi-182-mo1
Module coordinator		Module offered by
Institute of Molecular Infection Biology		Faculty of Medicine
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>Basic microbiological experiments are carried out. The internship includes methods of disinfection and sterilization, diagnostic determination of pathogens, staining and microscopy of grampositive and gramnegative pathogens, analysis of growth curves, determination of the cell count of bacteria, metabolic reactions in bacteria, determination of antibiotic resistance, familiarization with processes of horizontal gene transfer, generation of genetic mutations and their detection, analysis of gene regulation.</p>		
Intended learning outcomes		
<p>The students acquire the ability to apply microbiological and molecular methods with pathogenic bacteria. They are able to design, carry out and analyse scientific experiments. They are able to assess experimental and methodological errors. The students are able to develop strategies to solve problems. They can analyse and present own experimental data.</p>		
Courses (type, number of weekly contact hours, language – if other than German)		
P (5) + S (1) Module taught in: German / English		
Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)		
<p>a) written examination (45 to 90 minutes) or b) log (10 to 20 pages) or c) oral examination of one candidate each (20 to 30 minutes) or d) oral examination in groups of up to 3 candidates (approx. 20 minutes per candidate) or e) presentation (20 to 30 minutes). Language of assessment: German or English</p>		
Allocation of places		
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Additional information		
Additional information on module duration: 2 weeks, full time.		
Workload		
150 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Bachelor' degree (1 major) Biomedicine (2018)		