

Module title		Abbreviation
General Chemistry for Students of Biomedicine		o8-CH-BM-152-m01
Module coordinator		Module offered by
Dean of Studies Chemie (Chemistry)		Institute of Organic Chemistry
ECTS	Method of grading	Only after succ. compl. of module(s)
8	numerical grade	--
Duration	Module level	Other prerequisites
2 semester	undergraduate	--
Contents		
<p>The module teaches the basics of chemistry in theory and practice, with special emphasis on medical references. Starting with atoms and ending with biochemically relevant macromolecules, theories and principles of chemistry that are essential for the understanding of biochemical processes are dealt with. The focus of the practical course is on basic experimental working techniques and the safe handling of hazardous substances. For this purpose, qualitative and quantitative analyses as well as simple reactions are carried out and interpreted.</p>		
Intended learning outcomes		
<p>Describe and explain the basic models for structure and reactivity of chemical compounds. Draw structural formulas and set up reaction equations. Know and apply formulas for the calculation of substance-specific properties and parameters of chemical processes. Carry out and document experiments based on existing protocols. Verify theoretical models based on experimental findings. Explain the relationships between chemical properties and medical effects as well as the chemical background of diagnostic procedures.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
V (2) + V (2) + P (5)		
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>written examination (approx. 120 minutes) and assessment of practical skills during lab course (ungraded): Vortestate/Nachtestate (pre and post-experiment oral exams; approx. 15 minutes each) and log (approx. 3 to 5 pages)</p> <p>Assessment offered: Once a year, summer semester</p>		
Allocation of places		
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Additional information		
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Workload		
240 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		
<p>Bachelor's degree (1 major) Biomedicine (2015)</p> <p>Bachelor's degree (1 major) Biomedicine (2018)</p> <p>Bachelor's degree (1 major) Biomedicine (2020)</p>		