

Module: SE3 Pratical Course in Chemistry		
Exam: SE3 Pratical Course in Chemistry	LV.-No.:	ECTS-Points: 5 CP
Recommended Semester: 3rd Semester	Module: Mandatory	Language: German
Responsible lecturer: Prof. Dr. Wigbert Hillebrand	Cycle: Winter Term	Registration information:
Lecturer in charge: Prof. Dr. Wigbert Hillebrand, Prof. Dr. Ursula Bordewick-Dell		
Learning outcomes	Students are able <ul style="list-style-type: none"> to perform a safety-assured working method considering the respective laboratory regulations and the instructions of the Ordinance on Hazardous Substances to handle safely und correctly with conventional laboratory equipment in preparative and analytical laboratory tests to perform preparative and analytical experiments in the laboratory independently and evaluate the implementation or accuracy of the method used to perform simple qualitative detection reactions/ methods for food specific questions independently and evaluate the results explain the main methods for characterization and determination of food ingredients explain the main methods for isolating and characterizing biomolecules 	
Form of exam	Module exam: written exam (120 min)	
Form of teaching	<ul style="list-style-type: none"> Laboratory Course 	
Course contents	<ul style="list-style-type: none"> Separation and cleaning process Titrations, precipitation gravimetry Carboxylic acid ester synthesis Fat determination in cheese (§64 LFGB method) UV spectroscopy Chromatography Gel electrophoresis (agarose and SDS-PAGE) Protein determination 	
Workload	Presence (4 SWS): Preparation and Follow-up: Sum:	60 h 90 h 150 h
Requirements	Module exam G8 (Organic Chemistry) must be passed; Proof of participation in the safety instruction and Introduction to the laboratory regulations by signature Proof of attendance: is to be provided during the practical course and is a requirement for admission to the module examination	
Literature	Experimental provisions are provided	