

GEW-MC09 Methods in Mineralogy and Petrology		Number of credit points (LP): 12		
Module type (mandatory or elective module)	Core module			
Contents and qualification objectives of the module	<b>Contents</b> In-depth fundamentals of important methods in mineralogy, petrology and geochemistry, such as powder diffraction, structural analysis, (micro)analytical methods, spectroscopy, microscopy and electron microscopy, crystal mapping exercise or special laboratory methods, as well as appropriate computer-aided data analysis.  <b>Qualification goals</b> Students <ul style="list-style-type: none"><li>- acquire in-depth knowledge of the fundamentals of mineralogical and chemical examination methods for minerals, rocks and fluids</li><li>- learn the professional, and practical use of these methods for the investigation of minerals, rocks and fluids in different geoscientific questions and on different spatial scales</li><li>- are able to analyze and interpret physicochemical data, which they have also recorded independently, and transfer them to geoscientific model concepts</li></ul>			
Module examination (number, form, scope)	An examination of the following forms: Oral exam, 30-45 minutes Term paper/report, max. 25 pages			
Self-learning time (in time hours)	240			
Events (teaching forms)	Contact time (in semester hours)	Secondary examination (number, form, scope)		Partial module examination accompanying the course (number, form, scope)
		For the completion of the module	For admission to the module examination	
Lecture and exercise I (lecture and exercise)	2V+2T	-	-	-
Lecture and (field) exercise II (lecture and exercise)	2V+2T	-	-	-
Frequency		Winter semester (V+T I) and summer semester (V+T II)		
Prerequisite for participation in the module		None		
Teaching unit(s)		Geosciences		