

Module: Chemistry of Nonmetals			
University/Department/Institute: Freie Universität Berlin/Department of Biology, Chemistry, Pharmacy/Institute of Chemistry and Biochemistry			
Module supervisors: Lecturers of the module			
Entrance Requirements: none			
Goals of Qualification: Students have basic knowledge of the chemistry of nonmetals and are able to apply it. They have mastered the nomenclature and know important chemical classes and their reactions and the relevance of nonmetals and nonmetallic compounds to industry, technology and the environment. They are able to work independently and in groups to solve assignments relating to the discussed topics.			
Contents: Development of the elements, Hydrogen, noble gas compounds, halogens, chalcogens, compounds of B, Si, N, P, As, Sb, Bi, inorganic carbon compounds, concepts (multiple bonds of the heavy main group elements, poly anionic compounds, element-organic compounds, Zintl-phases, main group elements as ligands). In the tutorials skills provided by the lecture are repeated and deepened by exercises.			
Teaching methods	Hours of attendance (Hours per week)	Forms of active participation	Workload (hours)
Lectures	3	-	Presence (L) 45 Pre-, post-preparation (L) 45
Tutorials	1	Solving assignments, Contributions to topic related discussions	Presence (T) 15 Pre-, post-preparation (T) 15 Exam preparation and examination 30
Language offer of lecture		German	
Compulsory regular attendance		Attendance is recommended	
Workload (total)		150 hours	5 CP
Length of module		One semester	
Examination		Exam (120 minutes); The exam can also be conducted electronically	
Lecture is offered		Every summer semester	
Applicability		Bachelor study program Chemistry, Bachelor study program Chemistry for teachers in training, 60-CP-Module offer Chemistry	