

Module: Basic and Inorganic Chemistry			
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 basic and inorganic chemistry and are acquainted with important inorganic chemical classes and their reactions. They are able to apply the revised basic concepts and terminologies to new examples and to solve assignments concerning the discussed topics independently and in groups.			
Contents: Atomic structure and the periodic system, chemical bonds; inorganic substances, their characteristics and conversions; basic reaction- and compound types; properties and reactions of ions in aqueous solutions, basics of thermodynamics and reaction kinetics, oxidation and reduction, electrochemistry, discussion of specific chemical classes of compounds of the main group elements, basics of complex chemistry. The tutorial repeats and deepens the acquired knowledge with the help of assignments.			
Teaching methods	Hours of attendance (Hours per week)	Forms of active participation	Workload (hours)
Lectures	4	–	Presence (L) 60 Pre-, post-preparation (L) 60
Tutorials	2	Solving assignments, Contributions to topic related discussions	Presence (T) 30 Pre-, post-preparation (T) 30 Exam preparation and examination 60
Language offer of lecture		German	
Compulsory regular attendance		Attendance is recommended	
Workload (total)		240 hours	8 CP
Length of module		One semester	
Examination		Exam (180 minutes); The exam can also be conducted electronically	
Lecture is offered		Every semester	
Applicability		Bachelor study program Chemistry, Bachelor study program Biochemistry, Bachelor study program Chemistry for teachers in training, 60-CP-Module offer Chemistry	