Module: Basics of Mathematics for Chemists

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 acquired a basic understanding of mathematics to solve chemical assignments by using mathematical methods. They have acquired an overview of the analysis of variables and are able to use these methods.

Contents: Complex numbers, the definition of functions and elemental functions, limiting values, sequences and series, differential and integral equations for functions of variables, Introduction to the analysis of functions of multiple variables, approach to solving common differential equations of the 1st order

Teaching methods	Hours of attendance (Hours per week)	Forms of active participation	Workload (hours)	
Lecture	2	-	Presence (L) Pre-, post-preparation (L)	30 30
Tutorial	2	Solving assignments, Contributions to topic related discussions	Presence (T) Pre- , post-preparation (T) Exam preparation and examination	30 30 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 (180 minutes, grade: failed or passed) The exam can also be conducted electronically
Lecture is offered	Every semester
Applicability	Bachelor study program Chemistry, Bachelor study program Chemistry for teachers in training, 60-CP-Module offer Chemistry