

Module: Advanced 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 an understanding of mathematics concerning the analysis of functions with multiple variables and are able to use these. They know the mathematical concepts of linear algebra and can do calculations with vectors and matrices.			
Contents: Vectors, matrices, determinants, linear equation systems, algebraic eigenvalues, differential and integral equations for functions with multiple variables, differential equations, Fourier analysis			
Teaching methods	Hours of attendance (Hours per week)	Forms of active participation	Workload (hours)
Lecture	2	-	Presence (L) 30 Pre-, post-preparation (L) 30
Tutorial	2	Solving assignments, Contributions to topic related discussions	Presence (T) 30 Pre-, post-preparation (T) 30 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 semester	
Applicability		Bachelor study program Chemistry, Bachelor study program Biochemistry	