

Study programmes: BACHELOR STUDIES - Mathematics				
Course name: Analysis 1				
Lecturers: All lecturers of the Departments of Analysis (Department of Mathematical analysis, Department of Real and complex analysis, Department of Real and functional analysis)				
Status: Compulsory				
ECTS: 20				
Attendance prerequisites: No prerequisites.				
Course aims: Acquiring knowledge from the Mathematical Analysis, especially regarding sequences of real numbers, real functions of real variables, integrals and numerical series, necessary for further study of close subjects.				
Course outcome: The student needs to learn the basic concepts of Mathematical Analysis - limits, continuity and derivatives, and knows how to apply them, then the indefinite and definite integral, as well as the numerical and power series, and be able to apply them.				
Course content: The field of real numbers. Sequences of real numbers. Real functions of real variable. Continuity. Differential calculus. Indefinite integral. Definite Riemann integral and applications. Numerical series. Power series.				
Literature:				
1. D. Adnađević, Z. Kadelburg: Matematička analiza 1, Matematički fakultet, Beograd 2008.				
Number of hours: 18=9+9	Lectures: 8=4+4	Tutorials: 8=4+4	Laboratory: 2=1+1	Research: -
Teaching and learning methods: Frontal / Tutorial				
Assessment (maximal 100 points)				
Course assignments	points	Final exam		points
Lectures	-	Written exam		25
Exercises / Tutorials	10	Oral exam		35
Colloquia	30	Written-oral exam		-
Essay / Project	-			