

Study programmes: PhD studies – Mathematics – Analysis and Differential equations			
Course name: Global analysis			
Lecturers: Darko Milinković			
Status: Optional			
ECTS: 9			
Attendance prerequisites: Analysis on manifolds			
Course aims: Mastering the concepts and methods of global analysis			
Course outcome: The student should understand well and be able to apply the concepts and techniques of global analysis.			
Course content: Dynamic systems on manifolds, elements of Lyusternik-Schnirelmann and Morse theory, Banach manifolds, Fredholm operators on manifolds, applications.			
Literature: В. Драговић, Д. Милинковић, <i>Анализа на многострукостима.</i> К. Deimling, <i>Nonlinear Functional Analysis.</i>			
Number of hours: 10	Lectures: 4	Research: 6	
Teaching and learning methods: Frontal, individual, research			
Assessment (maximal 100 points)			
Course assignments	points	Final exam	points
Lectures		Written exam	
Exercises / Tutorials	50	Oral exam	50
Colloquia		Written-oral exam	
Essay / Project			