

Study programmes: PhD studies – Mathematics – Analysis and differential equations			
Course name: 3M150 Banach algebras			
Lecturers: Драгољуб Кечкић			
Status: Optional			
ECTS: 9			
Attendance prerequisites: None			
Course aims: Mastering of notions and methods of Banach algebras.			
Course outcome: Student should understand and be able to apply notions and techniques of the theory of Banach algebras.			
Course content: Definition of Banach algebras. Regular elements of Banach algebras. The spectrum of an element of a Banach algebra. Theorems of Gel'fand-Mazur type. Ideals in a Banach algebra. The radical of a Banach algebra. Semisimple algebras. Commutative Banach algebras. Topological space of maximal ideals.			
Literature:			
A. Torgasev: <i>Banahove algebre</i> , skripta, Beograd, 1995.			
M. A. Naimark: <i>Normed rings</i> (in russian), Nauka, Moskva, 1977.			
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			