

Study programmes: PhD studies – Mathematics – Analysis and differential equations			
Course name: 3M138 Harmonic analysis 2			
Lecturers: Miroslav Pavlović			
Status: Optional			
ECTS: 9			
Attendance prerequisites: -			
Course aims: Mastering of notions and methods of harmonic analysis.			
Course outcome: Student should understand and be able to apply notions and techniques of harmonic analysis.			
Course content: Harmonic functions in the plane. Harmonic functions in the space. Poisson's formula for domains in the \mathbb{R}^n . Boundary behavior, singular integrals, Fourier analysis and Fourier transform. Theory of potentials in \mathbb{R}^n and in strictly pseudoconvex domains.			
Literature:			
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			