Study programmes: MASTER STUDIES - Mathematics

Course name: Harmonic analysis 1

Lecturers: Miodrag Mateljević, Vladimir Božin, Miljan Knežević

Status: Optional

ECTS: 8

Attendance prerequisites: Complex analysis A, Complex analysis B, Geometric function theory

Course aims: Acquisition of general and special knowledge about harmonic functions

Course outcome: The student should understand well and be able to use the concepts and techniques of harmonic analysis.

Course content: Harmonic function in the plane. Poisson formula for the unit disk and the upper half plane. Rado-Kneser-Choquet theorem. Univalent harmonic mappings. Generalized harmonic mappings.

Literature:

1. P. Duren: Harmonic mappings in the plane, Cambridge.

Number of hours: 7Lectures: 3Tutorials: 2Laboratory: -Research: 2Teaching and learning methods:Frontal / Tutorial

Assessment (maximal 100 points)			
Course assignments	points	Final exam	points
Lectures	30	Written exam	40
Exercises / Tutorials	-	Oral exam	30
Colloquia	-	Written-oral exam	-
Essay / Project	-		