

Study programmes: MASTER STUDIES - Mathematics			
Course name: Selected Topics of Complex Analysis			
Lecturers: Miodrag Mateljević, Vladimir Božin, Miljan Knežević			
Status: Optional			
ECTS: 8			
Attendance prerequisites: No prerequisites.			
Course aims: Acquisition of general and special knowledge from complex analysis			
Course outcome: The student should understand well and be able to use the concepts and techniques of complex analysis.			
Course content: Harmonic and subharmonic functions. Harmonic mappings. Conformal invariants. Potential theory. Quasiconformal mappings. Foundations of Teichmüller theory. Analytic sets, domain of analyticity.			
Literature:			
1. Miodrag Mateljević: Kompleksne funkcije 1&2, Društvo matematičara Srbije, Beograd 2006.			
2. Б.В.Шабат: Введение в комплексный анализ, часть 1,2, Наука, Москва 1976.			
3. Lars Ahlfors: Complex analysis-An Introduction to the Theory of Analytic Functions of One Complex Variable, McGraw-Hill, 1979.			
4. Olli Lehto, Univalent functions and Teichmüller spaces. Graduate Texts in Mathematics, vol. 109, Springer-Verlag, 1987.			
Number of hours: 7	Lectures: 3	Tutorials: 2	Research: 2
Teaching and learning methods: Frontal / Tutorial			
Assessment (maximal 100 points)			
Course assignments	points	Final exam	points
Lectures	10	Written exam	40
Exercises / Tutorials	-	Oral exam	50
Colloquia	-	Written-oral exam	-
Essay / Project	-		