

Study programmes: PhD – Mathematics				
Course name: The geometry of discrete groups				
Lecturers: Zoran Lučić, Srđan N. Vukmirović, Zoran P. Rakić, Mirjana Đ. Đorić, Miroslava Antić				
Status: Optional				
ECTS: 9				
Attendance prerequisites: -				
Course aims: Acquisition of general and specific knowledge in geometry of discrete groups. Preparing student for individual scientific work: studying of literature in geometry of discrete groups and gradually including student for individual research work.				
Course outcome: Upon completion of the course, the student has necessary knowledge about: Möbius transformations, discontinuous groups, Riemann surfaces, isometries, Fuchsian groups, fundamental domains, finitely generated groups. Student is qualified to individual understanding basic examples and solving problems from this theory.				
Course content: Möbius transformations. Discontinuous groups. Riemann surfaces. Hyperbolic geometry of geodesics. Isometries. Fuchsian groups. Fundamental domains. Finitely generated groups.				
Literature:				
1. A. Beardon, Geometry of Discrete groups, 1995 Graduate Texts in Mathematics Vol 91 Springer Verlag, New York-Berlin-Heidelberg.				
Number of hours: 10	Lecures: 4	Tutorials: -	Laboratory: -	Research: 6
Teaching and learning methods: Lectures/ Tutorials				
Assessment (maximal 100 points)				
Course assignments	points	Final exam		points
Lectures	-	Written exam		-
Exercises / Tutorials	20	Oral exam		60
Colloquia	-	Written-oral exam		-
Essay / Project	20			