

Study programmes: MASTER STUDIES - Mathematics			
Course name: Lie groups			
Lecturers: Srđan N. Vukmirović, Zoran P. Rakić, Mirjana Đ. Đorić, Neda P. Bokan			
Status: Optional			
ECTS: 8			
Attendance prerequisites: No prerequisites.			
Course aims: Acquisition of general and specific knowledge of Lie groups and algebras in the case of matrix groups. Preparing students for advanced courses in this area.			
Course outcome: Upon completion of the course, the student mastered basic notions about matrix Lie groups and algebras. Student is qualified to individual understanding basic examples and solving problems from this area.			
Course content: Notion of Lie group and algebra. Matrix groups. Subgroups of Lie groups. Exponential mapping. Homomorphisms of Lie groups and algebras. Killing form.			
Literature:			
1. K. Tapp, Matrix Groups for Undergraduates, AMS, 2005.			
2. A. Gray, Lie groups, skripta, 1993.			
Number of hours: 7	Lectures: 3	Tutorials: 2	Laboratory: -
Research: 2			
Teaching and learning methods: Frontal / Tutorial			
Assessment (maximal 100 points)			
Course assignments	points	Final exam	points
Lectures	20	Written exam	-
Exercises / Tutorials	-	Oral exam	60
Colloquia	-	Written-oral exam	-
Essay / Project	20		