

Study programmes: Master studies – Mathematics				
Course name: Elementary Combinatorics				
Lecturers: Zoran Petrović, Dragana Todorić, Đorđe Krtinić				
Status: optional				
ECTS: 8				
Attendance prerequisites: Algebra 2				
Course aims: Acquisition of advanced knowledge of combinatorics.				
Course outcome: Upon completion of the course, the students have advanced knowledge from various fields of combinatorics. The students understand the following concepts: matroid, umbral calculus, combinatorial enumeration. They are familiar with advanced theorems from the field. Also, they are able to solve problems from various areas of combinatorics and to attend more advanced courses in which similar methods are applied.				
Course content: Enumerative combinatorics; graphs, matroids; algebraic combinatorics; Ramsey theory.				
Literature: 1. L. Lovasz, <i>Combinatorial problems and exercises</i> , North Holland, 1993: 2. R.P. Stanley, <i>Enumerative combinatorics, Vol. 1 and 2</i> , Cambridge University Press, 2001.				
Number of hours: 7	Lectures: 3	Tutorials: 4	Laboratory: -	Research: -
Teaching and learning methods: Lectures/ Tutorials/Seminars				
Assessment (maximal 100 points)				
Course assignments	points	Final exam	points	
Lectures	-	Written exam	20	
Exercises / Tutorials	-	Oral exam	40	
Colloquia	20	Written-oral exam	-	
Essay / Project	20			