

Study Program: Mathematics				
Type and level of studies: Bachelor studies, VI semester				
Course name: Geometry 2				
Lecturer: Vladicca S. Stojanović				
Status: Elective				
ECTS: 8				
Attendance Prerequisites: none				
Course aims: Acquisition of knowledge about the transformations of geometric space, the basic elements of stereometry and the geometry of the non-Euclidean type.				
Course outcome: The students are able to apply the acquired knowledge in problem solving. Further improving and applying the knowledge in others mathematical disciplines.				
Course content				
Theoretical part				
1. ISOMETRIC TRANSFORMATIONS (direct and indirect isometric transformations, strands of lines, classification of isometric transformations)				
2. THE SIMILARITY OF GEOMETRIC FIGURES (the concept and properties of similarity transformations, homothety, similarity transformations to canonical forms, basic attitudes about triangle similarity, harmonic sets of four points and lines, powers and inversions in relation to a circle)				
3. GEOMETRIC FIGURES IN SPACE (half-space and dihedral angle, rogaljevi i rogljaste površi, polyhedral surfaces and polyhedra, congruence of geometric figures in space, parallelism of lines and planes, constructions of geometric figures in space)				
4. Non-Euclidean geometry (the notion of geometric models, system of axioms of Lobachevsky geometry, system of axioms of Riemann geometry)				
Practical part				
The problems solved are in accordance with the theoretica in terms of content..				
Literature				
1. Лопандић Д. (1987) Геометрија, Научна књига, Београд				
2. Тошић Р., Петровић В. (1995) Проблеми из геометрије: методичка збирка задатака, ПМФ, Нови Сад				
Number of active classes				Other classes:
Lectures :2	Practical classes: 2	Students’ research work:	Other forms of teaching:	
Teaching methods				
Oral presentation method, interview method, active methods				
Assessment (maximum 100 points)				
Course assignments	points	Final exam	points	
activity during lectures	10	written exam	20	
term test(s)	0	oral exam	30	
seminar(s)	30			