Study Program: Mathematics	
Type and level of studies: Bachelor studies, III semester	
Course name: Geometry 1	
Lecturer: Vladica S. Stojanović	
Status: Compulsory	
ECTS: 7	
Attendance Prerequisites: none	

Course aims: Acquiring basic knowledge about the axiomatic-deductive foundation of geometry, as well as about basic geometric concepts and principles.

Course outcome: Using geometric models and methods in problem-solving and their application to other mathematical disciplines.

Course content

Theoretical part

1. Introduction (historical development of geometry, basic concepts and attitudes in geometry, incidence and arrangement)

2. Geometric figures of planes (segment and half-line, polygon and polygonal surface, half-plane and angle, convex sets in a plane)

3. Conformity (axioms of congruence and their consequences, the concept of isometric transformations, congruence of geometric figures in a plane)

4. Continuity (axioms of continuity and their consequences, system of measuring lengths and angles, concept of circle and circular surface)

5. Parallelism (axiom of parallelism and its consequences, relation of parallelism of lines and planes, application of parallelism in planimetry, vectors in geometry, constructions with a ruler and a compass)

Practical part

Practice is done in accordance with the theoretical part.

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	Other forms of teaching:	Students' research work	

Teaching methods

Lectures, auditory practice, laboratory, term tests, consulting, homework, written exam.

Assessment (maximum 100 points)			
Course assignments	**points**	Final exam	**points**
activity during lectures	**10**	written exam	**30**
practical classes	-	oral exam	**30**
term test(s)	**30**	....	
seminar(s)			
Total	**40**		**60**