Level: bachelor

Course title: Teaching of Mathematics 2 (M4-26)

Status: obligatory

ECTS: 5

Requirements: none

Learning objectives

Acquiring knowledge and skills necessary for teaching mathematics.

Learning outcomes

Students will learn to apply contemporary methodical principles and modern educational techniques and technology for preparation and teaching of mathematics.

Syllabus

Theoretical instruction

Analysis of the curriculum for elementary school mathematics. Analysis of curricula for high school mathematics, with special emphasis on the mathematical sciences. Technical and methodological aspects of some important topics in mathematics for elementary and secondary schools. Basic concepts of teaching. Didactic principles. Teaching forms. Types of modern teaching and learning models. Problem-programmed, differentiated and individualized teaching. Comparison. Analysis and Synthesis. Generalizations and abstractions. Organisation of teaching mathematics. Lesson plans. Mathematics class as a basic form of teaching. Education system of preparation for class. Educational technology. The classification of educational and technical resources. The use of calculators and computers in the teaching of mathematics. Complementary and supplementary education and extracurricular activities of students in mathematics. Method of work in schools with high volume of mathematics and its performance. Problems of modernizing the teaching of mathematics. Monitoring and evaluating students' work and achievements. The aim and objectives of evaluation in education. Characteristics evaluation and assessment methods. Assessment criteria and standards.

Practical instruction

The written preparation of classes, demonstration lessons and students' lecturing in elementary and secondary schools, analysis of teaching and instruction.

Weekly teaching load				Other: 0
Lectures: 2	Exercises: 2	Other forms of	Student research: 0	
		teaching: 0		