

<b>Study program:</b> Master in Mathematics Teaching (MP), Mathematics (MA)
<b>Level:</b> master
<b>Course title:</b> Teaching of mathematics 1 (MP-01)
<b>Lecturer:</b> Dragoslav Đ. Herceg, full professor
<b>Status:</b> obligatory
<b>ECTS:</b> 5
<b>Learning objectives</b> This course teaches students knowledge and skills necessary for teaching mathematics.
<b>Learning outcomes</b> Students will learn to apply contemporary methodical principles and modern educational techniques and technology for preparation and teaching of mathematics.
<b>Syllabus</b> <i>Theoretical instruction</i> Mathematics – the scientific discipline and subject. Methods of teaching mathematics. Psychological, pedagogical and logical foundations of mathematics. Forms of thinking in the teaching of mathematics. Mathematical concepts and methodologies of their introduction into the teaching of mathematics. Induction and deduction. Analogy. Teaching methods in teaching mathematics. The role and place of assignments in mathematics, their choice depending on the goals of teaching and methods of solving tasks. Catalogue of heuristic rules. The method of teaching programming. Learning outcomes, differentiation and individualization. The types of classes in mathematics. Forms of work. Monitoring and evaluation of student performance. Planning in teaching mathematics. Motivating and encouraging the learning of mathematics. <i>Exercises</i> The written preparations of classes, demonstration lessons and students' lecturing in elementary and secondary schools, analysis of teaching and instructions.

<b>Literature</b>
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| <ol style="list-style-type: none"> <li>1. Zech, F.: <i>Grundkurs Mathematik didaktik—theoretische und praktische Anleitungen für das Lehren und Lernen von Mathematik</i>, Beltz Verlag – Weinheim und Basel, Berlin, 1999.</li> <li>2. Марјановић, М.: <i>Методика математике I</i>, Учитељски факултет, Београд, 1996.</li> <li>3. Марјановић, М.: <i>Методика математике II</i>, Учитељски факултет, Београд, 1996.</li> </ol> |
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<b>Weekly teaching load</b>				
Lectures 2	Exercises 2	Other forms of teaching	Student research	Other
<b>Teaching methods</b> Lectures, written analysis prepared for classes and class demonstrations. Analysis of classes held in the elementary and secondary schools. Tests.				
<b>Grading (maximum number of points 100)</b>				
<b>Pre-exam obligations</b>		<b>points</b>	<b>Final exam</b>	
Activity during lectures		2	Oral exam	
Activity during Exercises		8	Practical exam	
Colloquia		30		