

Study Program: Informatics				
Type and level of studies: Bachelor studies, V semester				
<b>Course name: Methodology of teaching mathematics</b>				
<b>Lecturer: Dojčin S. Petković</b>				
Status: Compulsory				
ECTS: 8				
Attendance Prerequisites: none				
<b>Course aims</b>				
Familiarizing students to the basic notions and methods of teaching mathematics. Preparing students for the application of didactic knowledge in teaching mathematics.				
<b>Course outcome</b>				
The students have acquired the didactic skills and knowledge necessary to teach mathematics efficiently and professionally.				
<b>Course content</b>				
<i>Theoretical part</i>				
Mathematics as science and as a subject. Methodology of teaching mathematics; the concept and subject of mathematics teaching methodology. Psychological - pedagogical and logical bases of mathematics teaching. The forming of concepts and their comparison according to the degree of abstraction. Didactic principles. Methods of teaching mathematics - concept and classification, traditional and modern teaching methods. Mathematical problems - classification, significance and role; selection and solving procedures. Teaching parts - types and structure. Forms of teaching in mathematics - frontal, group and individual. Motivation and encouragement in learning mathematics. Regular, additional and supplementary classes, mathematical competitions, distance learning. Checking and grading student work - assessment characteristics, forms and methods of assessment, criteria and norms of assessment. Teaching aids and equipping rooms for teaching mathematics - the concept, role and classification of teaching aids. Textbooks, worksheets, workbooks, computers and educational software. Equipping the classroom with teaching aids and literature.				
<i>Practical part</i>				
During the exercises, the topics covered in the lectures are elaborated on using concrete examples; the students write a seminar paper on a selected topic from the mathematics curricula in primary and secondary schools.				
<b>Literature</b>				
<ol style="list-style-type: none"> <li>1. М. Марјановић, <i>Методика математике I и II</i>, Учитељски факултет, Београд, 1996.</li> <li>2. Ј. Пинтер, Н. Петровић, В. Сотировић, Д. Липовац, <i>Опита методика наставе математике</i>, Учитељски факултет, Сомбор, 1996.</li> <li>3. С. Првановић, <i>Методика савременог математичког образовања у основној школи</i>, Завод за уџбенике и наставна средства, Београд, 1970.</li> <li>4. Л. Драгичевић, <i>Методика наставе математике са ужестручним прилозима за праксу</i>, Учитељски факултет</li> <li>5. Бијељина, 2000.</li> </ol>				
<b>Number of active classes</b>		<b>Lectures: 3</b>	<b>Practical classes: 3</b>	
<b>Teaching methods</b>				
<b>Assessment (maximum 100 points)</b>				
<b>Course assignments</b>		<b>points</b>	<b>Final exam</b>	<b>points</b>
activity during lectures		10	written exam	
practical classes		25	oral exam	45
term test(s)			.....	
seminar(s)		20		
Total		55		45