

<b>Course title: Solving mathematical problems</b>			
<b>Lecturers: Dragoslav Herceg, Đurđica Takači, Siniša Crvenković</b>			
<b>Status: elective</b>			
<b>ECTS: 15</b>			
<b>Requirements:</b>			
<b>Course objective:</b> The aim of course is to enable students to carry out independent research in the field of education, didactic-methodical approach to solving mathematical problems.			
<b>The outcome of the course:</b> Student will be able for research in science and mathematics education. Students will develop the ability to apply different didactical methods and approaches to solving mathematical problems			
<b>Syllabus</b> <i>Theoretical instruction</i> The concept the problems in mathematics, Creative skills: imagination, formulating hypotheses, transformation, Typical errors in problem solving, Basic concepts of problem solving in small groups. Problem-solving tasks with the computer.			
<b>Suggested literature:</b> 1) Alan H. Schoenfeld ,Mathematical Thinking and Problem Solving, 1994. Routledge 2) Миодраг Петковић, Занимљиви математички проблеми , Научна књига ,. Београд, 1988. Ј. П. 3) John P. D'Angelo Douglas B. WestMathematical Thinking: Problem-Solving and Proofs by , Prentice Hall; December 17, 1999 4) William Flannery, Calculus Without Tears: Lesson Sheets for Learning Calculus for Students from the 4th Grade Up Publisher: Berkeley Science Books 2002			
<b>Weekly teaching load</b>			Other:
Lectures: 5	Exercises:	Other forms of teaching:	
			Student research: 5
<b>Teaching methodology</b> Lectures, solving problems with and without computer. Exercises and colloquiums in Computer laboratory.			
<b>Grading (maximal number of points 100)</b>			
<b>Pre-exam requirements</b>	points	<b>Final exam</b>	points
Activities during lectures	<b>4</b>	Oral exam	<b>40</b>
Practical teaching	<b>4</b>		
Colloquia	<b>52</b>		
Seminar papers			