

<b>Study program:</b>	Civil Engineering		
<b>Level of study:</b>	Undergraduate academic studies		
<b>Course title:</b>	<b>MATHEMATICS 1</b>		
<b>Teacher:</b>	Hajnalka Peić		
<b>Course Status:</b>	Compulsory		
<b>Credits (ECTS):</b>	6		
<b>Prerequisite:</b>	None		
<b>Course objective(s):</b>	The purpose and goals of the course is to develop students' mathematical thinking and enable them to obtain a basic level of knowledge in the mathematical terms and their properties with the aim that they can later apply them in practice.		
<b>Course outcome(s):</b>	The realization of the planned objectives.		
<b>Course Content:</b>			
1 <sup>st</sup> week	<i>Theory:</i> Basic concepts of the theory of sets and the algebraic structures <i>Practice:</i> Polynomials		
2 <sup>nd</sup> week	<i>Theory:</i> Polynomials <i>Practice:</i> Polynomials		
3 <sup>rd</sup> week	<i>Theory:</i> Polynomials <i>Practice:</i> Polynomials		
4 <sup>th</sup> week	<i>Theory:</i> Rational functions <i>Practice:</i> Rational functions		
5 <sup>th</sup> week	<i>Theory:</i> Determinants <i>Practice:</i> Determinants		
6 <sup>th</sup> week	<i>Theory:</i> Matrices <i>Practice:</i> Matrices		
7 <sup>th</sup> week	<i>Theory:</i> Systems of linear equations <i>Practice:</i> Systems of linear equations		
8 <sup>th</sup> week	<i>Theory:</i> Application of the matrices <i>Practice:</i> Application of the matrices		
9 <sup>th</sup> week	<i>Theory:</i> Vector algebra <i>Practice:</i> Vector algebra		
10 <sup>th</sup> week	<i>Theory:</i> Analytic geometry of a space <i>Practice:</i> Analytic geometry of a space		
11 <sup>th</sup> week	<i>Theory:</i> Linear programming <i>Practice:</i> Linear programming		
12 <sup>th</sup> week	<i>Theory:</i> Sequences of real numbers <i>Practice:</i> Sequences of real numbers		
13 <sup>th</sup> week	<i>Theory:</i> Sequences of real numbers <i>Practice:</i> Sequences of real numbers		
14 <sup>th</sup> week	<i>Theory:</i> Vector space <i>Practice:</i> Vector space		
15 <sup>th</sup> week	<i>Theory:</i> Second order curves and surfaces <i>Practice:</i> Vector space		
<b>Literature:</b>	<ol style="list-style-type: none"> <li>1. J. Detki, F. Ferenci: <i>Matematika 1</i>, Univerzitet u Novom Sadu, Građevinski fakultet Subotica, Subotica, 1982.</li> <li>2. M. P. Ušćumlić, P.M. Miličić: <i>Zbirka zadataka iz više matematike 1</i>, Naučna knjiga, Beograd, 1986.</li> <li>3. H. Peić, L. Sarapka: <i>100 rešenih ispitnih zadataka</i>, Univerzitet u Novom Sadu, Građevinski fakultet Subotica, 1996.</li> <li>4. O. Hadžić, Đ. Takači: <i>Matematičke metode za studente prirodnih nauka</i>, Univerzitet u Novom Sadu, Prirodno-matematički fakultet, Novi Sad, 2000.</li> <li>5. H. Peić, <i>Matematika 1</i>, Univerzitet u Novom Sadu, Građevinski fakultet Subotica, Subotica, 2006.</li> <li>6. H. Peić, A. Rožnjik, <i>Mađarsko-srpsko-engleski matematički rečnik</i>, Vojvodanski centar za metodiku, Subotica, 2007.</li> </ol>		
<b>Number of hours:</b>			Other classes: 0
Lectures: 3	Exercises: 3	Other forms of teaching: 0	Individual research work: 0
<b>Teaching methods:</b>	Lectures, exercises, seminars, consultations		
<b>Evaluation of knowledge (maximum 100 points)</b>			
<b>Pre-exam activities</b>	<b>points</b>	<b>Final exam</b>	<b>points</b>
Activity during the lectures	5	Written exam	60
Activity during the exercises	5		
Colloquia	30		