

Study program		Study cycle Orientation		First study cycle Regional and Spatial Planning			
SUBJECT							
Subject name		Introduction to Mathematics					
Subject code	Semester	Subject status		ECTS credits	Contact hours		
M-001	I	optional		2	50		
Prerequisites							
Assigned professors and assistants	Subject Leader		Dr. Sc. Fikret Čunjalo, associate professor				
	Teaching Assistants		Mr. Daniela Zubović, senior associate				
Subject objectives		The aim of the course is to introduce students to the fundamentals of statistical methods					
SUBJECT CONTENT							
#	Teaching units	Contact hours					
		L	P	S	C		
1.	Proportions	1	1				
2.	Percentage	1	1	1			
3.	Rectangular Cartesian coordinate system in the plane and space	1	1		1		
4.	The polar system in the plane. Cylindrical and spherical systems in space	1	1				
5.	Elementary functions; Systems of linear equations	1	1		1		
6.	Gauss method for solving the system of linear equations	1	2	1			
7.	Test I	1					
8.	Definition of a matrix. Operations in the set of matrices	1	1		1		
9.	Determinants. Elementary transformations of matrices	1	1	1			
10.	Determinante. Laplace's development	1	1		1		
11.	Solving systems of linear equations by using a Kramer's Rule	1	1	1			
12.	Matrix equation	1	1				
13.	Solving systems of linear equations by using an elementary transformation matrix	1	1	1	1		
14.	The method of least squares.	1	2				
15.	Application of methods of the least squares.	1					
STUDENT WORKLOAD (HOURS)							
Contact Hours (L+P)	30	Practical work		Seminars	5	Exam study time	10
Literature – reading		Written papers		Other (state)	5	TOTAL	50
LITERATURE			EVALUATION OF KNOWLEDGE AND CRITERIA				
<ul style="list-style-type: none"> • Lang, S.: Introduction to linear algebra, Springer, 1986. • Ljubović, Ć.: Matematika, Sarajevo, 1997. 				PARAMETERS	Maximum Points	Minimum points	
			1.	Attendance	5	3	
			2.	Participation on lectures	5	3	
			3.	Midterm exams	30	16	
			4.	Seminar	10	6	
			5.	Students project			
			6.	Final exam	50	27	
Total		100	55				