

Study program: Mathematics (M3)			
Course title: Elementary mathematics 2			
Lecturer: Đurđica B. Takači			
Course status: elective			
Credit points: 5 ECTS			
Requirements: -			
Course objectives: The aim of the course is to synthesize the contents of the function concepts by using the appropriate programme package e.g. <i>GeoGebra</i> .			
Learning outcomes: Student will be able to overcome difficulties caused by transition from elementary to advance mathematical thinking, and to continue with accepting the limit processes and other contents in advance mathematics.			
Course description (outline): Theoretical contents: <ul style="list-style-type: none"> • Definition, the notion of function and its properties. • Quadratic, rational, logarithmic, exponential and trigonometric functions as the mathematical models for real word problems. • Mathematical modelling by using dynamic software Exercises are supposed to follow contents taught in theory classes.			
References: <ol style="list-style-type: none"> 1. Đ. Takači, A. Takači, A. Takači, Elementi više matematike, Simbol Novi Sad 2. A. Zolić, Z. Kadelburg, S. Ognjanović, Analiza sa algebram 1,2,3,4, Zavod za udžbenike i nastavna sredstva, Beograd 3. V. Stojanović, Zbirka rešenih zadataka, Matematiskop, Beograd 			
Weekly teaching load			
Lectures: 2	Exercises: 2	Other forms of teaching: 0	Student research: 0
Methods of teaching: Classic methods of teaching such as presenting the material using a video beam.			
Grading (maximum number of points 100)			
Pre-exam obligations	Points	Exam	Points
homework	15	Oral exams	40
seminar	45		