

Study Program: Mathematics			
Type and level of studies: Bachelor studies, IV semester			
Course name: Programming and programming languages			
Lecturer: Hranislav M. Milošević			
Status: Compulsory			
ECTS: 7			
Attendance Prerequisites: none.			
Course aims Enabling mathematics students to apply the acquired knowledge in higher mathematics: sequences, arrays, probabilities; recognition and analysis of computer and information technologies, using the Pascal programming language.			
Course outcome The students have mastered the necessary knowledge of the basics of computer systems, computer technology, related to the fields of mathematics, using Pascal programming language.			
Course content <i>Theoretical part</i> The history and concept of computer systems and technologies. Artificial languages and their grammar. Algorithmic schemes and diagrams and program testing. Basic program structure. Basic elements of the Pascal language. Elementary constructions and data. Constants and variables. Pascal programming language commands. Elementary functions. Subprograms. New programs, basic elements of C++ and Java programs, informative. <i>Practical part</i> Practicing tasks from the above areas with discussions on exercises. Working with Pascal and Turbo Pascal programs on computers.			
Literature 1. М. Јауковић, В. Пантић, Програмски језик Pascal, Научна књига, Београд 1987 2. Н. Раденковић-Контрећ и Х. Милошевић, Збирка задатака из Програмирања и Pасcala, скрипта, ПМФ Косовска Митровица, К.Митровица 2008			
Number of active classes			Other classes
Lectures: 3	Practical classes: 2	Other forms of teaching:	
		Students' research work	
Teaching methods Standard lecturing methods are used during lectures. In practical classes, the principles and problems are analysed.			
Assessment (maximum 100 points)			
Course assignments	points	Final exam	points
activity during lectures	20	written exam	20
practical classes	20	oral exam	20
term test(s)	20	
seminar(s)			
Total	60		40