

Course Unit Descriptor

Study Programme: Information Technologies			
Course Unit Title: Analysis for Students of Informatics			
Course Unit Code: IT151			
Name of Lecturer(s): Dušanka Perišić			
Type and Level of Studies: Bachelor Academic Degree			
Course Status (compulsory/elective): Compulsory			
Semester (winter/summer): Winter			
Language of instruction: Serbian (primary), English (secondary)			
Mode of course unit delivery (face-to-face/distance learning): Face-to-face			
Number of ECTS Allocated: 8			
Prerequisites: None			
Course Aims: The aim of the course is to help students to master tools of differential and integral calculus so that they are able to use them in analyzing the functions of one real variable.			
Learning Outcomes: <i>Minimum:</i> Understanding the basic concepts of the differential and integral calculus. <i>Desirable:</i> Effective application of these concepts in analysis of functions of one real variable.			
Syllabus: <i>Theory</i> <ul style="list-style-type: none"> • The concepts of function, limit values and continuity • Derivatives and their applications • Antiderivative • Integrals and their applications • Sums and Functional sums <i>Practice</i> -			
Suggested Reading: 1. Gilbert Strang. RES.18-001 Calculus Online Textbook. Spring 2005. Massachusetts Institute of Technology: MIT OpenCourseWare, https://ocw.mit.edu . License: Creative Commons BY-NC-SA. 2. J. Stewart, Calculus, Early Transcendentals, Brooks/Cole, 2008			
Weekly Contact Hours: 6	Lectures: 3		Practical work: 3
Teaching Methods: Lecture sessions and exercise sessions.			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Colloquia	60	Oral exam	40
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			