

NAME OF THE COURSE		A Methodical Informatics Seminar with Teaching Practice I				
Code	PMIK61	Year of study	GU-2			
Course teacher	izv. prof.dr. sc. Ivica Boljat	Credits (ECTS)	3,0			
Associate teachers	Monika Mladenović	Type of instruction (number of hours)	L	S	E	F
				15	30	
Status of the course		Percentage of application of e-learning	20			
COURSE DESCRIPTION						
Course objectives	To enable students to prepare, perform and analyze all kinds of information technology, mastering a variety of repertoire teaching methods, adequate media use, and preparing secondary school students for IT competitions.					
Course enrolment requirements and entry competences required for the course	Completed Methods of teaching computer science.II. The pre-requisite for the test hour is MNI1. Knowledge of didactic theories, teaching methods and the basics of informatics-					
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	<p>Students will:</p> <ul style="list-style-type: none"> - Develop an annual plan for the Informatics subject in high school and elaborate it for teaching units and themes - master the diverse repertoire of the teaching model and argue for a choice of the most appropriate in the given circumstances - use the media adequately - Prepare a lesson based on their own experience and the results of scientific research related to the realization of this theme in teaching, focusing on students' difficulties and misunderstanding - acquire practical skills in formative and summative evaluation (oral, written, practical, projects, portfolio) 					
Course content broken down in detail by weekly class schedule (syllabus)	<p>1. Teaching Preparation - a general model derived from didactic theories and models of teaching and the recommendation of leading theories of learning. According to this model, preparations are made for key topics such as procedural programming, object programming, data structures, databases, operating systems, software packages for word processing, table computing, web site design, etc. (0 + 0 + 30)</p> <p>2. Computer science competitions for high school students (Infokup, HSIN ..). Analysis of tasks, input and output data, variables and their purpose, choice of task assignment for students, simulation of paper pencil algorithm, choice of suitable data structures and algorithms, efficiency analysis, alternative solutions, decomposition of complex tasks into subproblems, choice of test examples. Python Encoding (0 + 15 + 0)</p>					
Format of instruction	<input type="checkbox"/> lectures <input checked="" type="checkbox"/> seminars and workshops <input checked="" type="checkbox"/> exercises <input type="checkbox"/> on line in entirety <input type="checkbox"/> partial e-learning <input type="checkbox"/> field work	<input type="checkbox"/> independent assignments <input type="checkbox"/> multimedia <input type="checkbox"/> laboratory <input checked="" type="checkbox"/> work with mentor <input checked="" type="checkbox"/> homework assignments				
Student responsibilities	<p>1 - Exam - Tasks from IT competitions of high school students</p> <p>2. 12 hours of attendance in SCE, 3 written preparations, 1 test and 1 test hour</p> <p>3. Regularly solving IT competitions for DS students.</p> <p>4. Essay on Secondary School Teaching Practice</p>					

Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)	Name	Ects	Name	Ects	Name	Ects
	Class attendance	1	Research		Experimental work	
	Oral exam		Report		Homework assignments	1,4
	Seminar essay	0,2	Essay			
	Tests		Practical training	0,4		
	Written exam		Project			
Grading and evaluating student work in class and at the final exam	Weekly solving of the competition and exposure and / or written exams (60%), grades from the teaching practice (40%)					
Required literature (available in the library and via other media)	Title			Number of copies in the library	Availability via other media	
	Informatics textbooks for high school			5		
	Tasks from high school informatics competitions (Infokup, HSIN, ...) and ICPC			0	yes	
Optional literature (at the time of submission of study programme proposal)						
Quality assurance methods that ensure the acquisition of exit competences	Conversation with students, student evaluation using anonymous poll, student success, self-assessment, mentor reports, student essays					
Other (as the proposer wishes to add)						