

NAME OF THE COURSE		Teaching biology outside the classroom				
Code	PDB268	Year of study	2			
Course teacher	Associate Professor Mirko Ruščić, PhD	Credits (ECTS)	2			
Associate teachers		Type of instruction (number of hours)	L	S	E	F
			15		15	
Status of the course	Elective	Percentage of application of e-learning	10			
COURSE DESCRIPTION						
Course objectives	To explain the tasks of extra-curricular teaching, the specifics of extra-curricular teaching, to analyze the specifics of the teaching strategy in nature teaching, to describe the significance and types of curriculum excursions					
Course enrolment requirements and entry competences required for the course	Course: Biology Education I and Biology Education II. Incoming Competences: basic methodical knowledge, professional competences from biology					
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	<p>Student will be able to:</p> <ol style="list-style-type: none"> 1. Choose a space for learning the contents in the immediate reality, 2. Choose the form of extra-class teaching according to the possibilities and content of the topic, 3. to anticipate the knowledge and skills that students need to have in order to be able to successfully learn by discovering in nature or the environment, 4. Develop a curriculum for extracurricular classes in accordance with the plan and program, 5. Select appropriate methods of work, 6. prepare appropriate teaching aids and aids for these students, 7. Evaluate the work of students outside the classroom, 8. Critically reflect on their own work and the success of extra-curricular classes 					
Course content broken down in detail by weekly class schedule (syllabus)	<p>Lectures: / Exercises:</p> <ol style="list-style-type: none"> 1. Exercise classes. Didactic specifics and types of extra-class teaching. Sources of Knowledge in Immediate Real Life 2. The special features of the teaching strategy in nature teaching (environment). Types of teaching excursions. Subjective and objective factors of excursion teaching and their activity. 3. Stages in preparing and performing excursions. Evaluation of extracurricular activities. Administrative, Educational and Security Lecturers Teacher 4. Prepare extra-curricular classes for a school garden or park. Prepare one-hour or two-hour extra-class classes. Preparing a half-day or a day-time extra-curriculum. Preparing multi-day non-teaching classes. 5. Preparation, implementation and evaluation of two-hour extra-curricular teaching in a nearby park or zoo. 6. Show lesson with colleagues and colleagues. Preparation, implementation and evaluation of two-hour extra-curricular teaching in the environment of elementary or high school. 7. Work in co-operation with the mentor and conduct teaching with the students. 8. Evaluation of the work of the students, their own work and the success of the extra-curriculum. 					

Format of instruction	<input checked="" type="checkbox"/> lectures <input checked="" type="checkbox"/> seminars and workshops <input type="checkbox"/> exercises <input type="checkbox"/> <i>on line</i> in entirety <input type="checkbox"/> partial e-learning <input type="checkbox"/> field work		<input checked="" type="checkbox"/> independent assignments <input checked="" type="checkbox"/> multimedia <input checked="" type="checkbox"/> laboratory <input type="checkbox"/> work with mentor <input type="checkbox"/> (other)			
Student responsibilities	Attendance at least 70%. Include two colloquia or a written exam					
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)	Class attendance	0,5	Research		Practical training	0,5
	Experimental work		Report		(Other)	
	Essay		Seminar essay	0,5	(Other)	
	Tests		Oral exam	0,5	(Other)	
	Written exam		Project		(Other)	
Grading and evaluating student work in class and at the final exam	Attendance at least 70%. Evaluation of the oral exam					
Required literature (available in the library and via other media)	Title			Number of copies in the library	Availability via other media	
	De Zan, I (2001) The method of teaching nature and society. Školska knjiga, Zagreb			2		
	Borić, E., Peko, A., Vujnović, M (2002) Learning about nature from nature. In: Good quality school. Split. HPKZ Branch Split					
	Klippert, H (2001) How to successfully master the team. Educa, Zagreb				web	
	Kranjčev, B (1985) Introduction of students into research work. Školska knjiga, Zagreb					
	Grubić, M., 1969: Method of teaching nature and biology. Pedagogical Literary Choir, Zagreb					
	Horvat, I. (1949) Science on Plant Communities. The Croatian Publishing House, Zagreb					
	Ruščić, M., Antolić, M., 2006: Man, health and the environment. Handbook for Secondary Vocational Teachers. Školska knjiga, Zagreb.					
	Nikolić, T., Ruščić, M and others (2008) Flora of the Adriatic coast and 250 islands of the most common species. Školska knjiga, Zagreb. Terhart, E., (2001) Teaching and Learning Methods. Educa, Zagreb.					
Riedl, R (1963) Fauna und Flora der Adria. Verlag Paul Parey. Hamburg and Berlin.						
Optional literature (at the time of	Marzano, RJ, Pickering, DJ, Pollock, JE, 2006. Teaching Strategies: How To Apply Nine Most Successful Teaching Strategies Translation T. Jakovčević, EDUCA,					

submission of study programme proposal)	Zagreb Sampson, V., Schleigh S., 2012. Scientific Argumentation in Biology: , NSTA Brown, CR 1995. The effective teaching of biology. Longman Publishing, New York Koba S., Tweed A. 2009.Hard-to-teach biology concepts: a framework for deepening student understanding. NSTA press. Arlington, Virginia, USA.
Quality assurance methods that ensure the acquisition of exit competences	Active participation in teaching, evaluation of subjects and teachers, consultations
Other (as the proposer wishes to add)	