

NAME OF THE COURSE		Field Training in Invertebrates					
Code	PMB027	Year of study	2				
Course teacher	Associate Professor Biljana Apostolska, PhD	Credits (ECTS)	0,5				
Associate teachers		Type of instruction (number of hours)	L	S	E	F	
			15				
Status of the course	Mandatory	Percentage of application of e-learning	10%				
COURSE DESCRIPTION							
Course objectives	The aim of the subject is to educate the students how to take the samples of invertebrate fauna independently, how to make preparation of collected animals, how to determine and how to prepare the collection of invertebrates. Also, through the visiting the students will better understand the role of National Parks as well as the Nature parks.						
Course enrolment requirements and entry competences required for the course	There are no entry competencies						
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. explain zoogeographical characteristics of the mediterranean part of Croatia with the special accent on the Dinaric karst. 2. To know the most important species from the biotopes above. 3. To make the analyse of biology of some species (daily and seasonal dynamic of some populations) 4. The adaptations of some species on climatic conditions (nanism) 5. To recognise the main species of the Dinaric karst included the macroinvertebrates of the karst rivers 6. How to collect the invertebrates using the different tools like tramps, net,... and how to use the determination keys 						
Course content broken down in detail by weekly class schedule (syllabus)	<p>Exercises:</p> <ol style="list-style-type: none"> 1. 5 hours of excursion in NP Krka 2. 3 hours of excursion in a Park Forrest Marjan 3. 4 hours of excursion in the cave Vranjača-Dugopolje 4. 3 hours of laboratory work 						
Format of instruction	<input checked="" type="checkbox"/> lectures <input 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 checked="" type="checkbox"/> field work		<input type="checkbox"/> independent assignments <input type="checkbox"/> multimedia <input checked="" type="checkbox"/> laboratory <input type="checkbox"/> work with mentor <input type="checkbox"/> (other)				
Student responsibilities	To participate in full						
Screening student work (name the proportion of ECTS credits for each activity so that the total number of	Class attendance		Research		Practical training	0,5	
	Experimental work		Report		(Other)		
	Essay		Seminar essay		(Other)		

<i>ECTS credits is equal to the ECTS value of the course)</i>	Tests		Oral exam		(Other)	
	Written exam		Project		(Other)	
Grading and evaluating student work in class and at the final exam	- oral exam based on the collection of invertebrates					
Required literature (available in the library and via other media)	Title			Number of copies in the library	Availability via other media	
	Garms H. & Borm L. 1981. Fauna Evrope. Mladinska knjiga, Ljubljana, 550 pp. Schneider – Jacoby M. & Ern H. 1993. Park prirode Lonjsko polje. Hrvatsko ekološko društvo Zagreb, 135 pp. Mrakovčić M., Brigić A., Buj I., Čaleta M., Mustafić P., Zanella D. 2006. Crvena knjiga slatkovodnih riba Hrvatske. Ministarstvo kulture, Državni zavod za zaštitu prirode RH, 253 pp. Antolović J., Frković A., Grubešić M., Holcer D., Vuković M., Flajšman E., Grgurev M., Hamidović D., Pavlinić I., Tvrtković N. 2006. Crvena knjiga sisavaca Hrvatske. Ministarstvo kulture, Državni zavod za zaštitu prirode RH, 127 pp.					
	Crvena knjiga špiljske faune Hrvatske. Ministarstvo kulture, Državni zavod za zaštitu prirode RH, 371 pp.					
	Biološka raznolikost Hrvatske. Fauna. Priručnici za inventarizaciju i praćenje stanja. 2008.					
	DZZP, Zagreb Ozimec R., Bedek J., Gottstein S., Jalžić B., Slapnik R., Štamol V., Bilandžija H., Dražina T., Kletečki E. Komerički A., Lukić M., Pavlek M. 2009.					
	Jardas I., Pallaoro A., Vrgoč N., Jukić-Peladić S., Dadić V. 2008. Crvena knjiga morskih riba Hrvatske. Ministarstvo kulture, Državni zavod za zaštitu prirode RH, 396 pp.					
	Belančić A., Bogdanović T., Franković M., Ljuština M., Mihoković N., Vitas B. 2008. Crvena knjiga vretenaca Hrvatske. Ministarstvo kulture, Državni zavod za zaštitu prirode RH, 132 pp.					
	Janev Hutinec B., Kletečki E., Lazar B., Podnar Lešić M., Skejić J., Tadić Z., Tvrtković N. 2006. Crvena knjiga vodozemaca i gmazova Hrvatske. Ministarstvo kulture, Državni zavod za zaštitu prirode RH, 95 pp					
	Zahradnik J. 1990. Insects. Aventinum Nakladitelstvi, Prague. 319 pp.					

Optional literature (at the time of submission of study programme proposal)	Zahradnik J. 1991. Bees and Wasps. Aventinum Nakladitelstvi, Prague. 192 pp. Wachman E. und Saure C. 1997. Netzflügler, Schlamm und Kamelhalsfliegen. Natur Buch Verlag, Augsburg, 159 pp. Haupt J. und Haupt H. 1998. Fliegen und Mücken. Natur Buch Verlag, Augsburg, 351 pp. Krčmar S., D.K. Hackenberger, B.K. Hackenberger 2011. Key to the horse flies fauna of Croatia (Diptera, Tabanidae). Periodicum biologorum 113, Suppl. 2, 1-61.
Quality assurance methods that ensure the acquisition of exit competences	Students questionnaires
Other (as the proposer wishes to add)	