

NAME OF THE COURSE		Entomology				
Code	PMB412	Year of study	3			
Course teacher	Assistant Professor Sanja Puljas, 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	The aim of this course is to provide students with basic knowledge of insect systematics and their biological and economic importance, with special reference to the protection of insect biodiversity. Students will learn about the different methods in entomology.					
Course enrolment requirements and entry competences required for the course	Attended course of Basic Zoology and Invertebrates					
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"> interpret knowledge about the origin of insects and their distribution, describe the morphological and anatomical features of the different insect orders, identify the major taxonomic groups of insects, understand the importance of protecting the insect biodiversity, explain the economic importance of insects. 					
Course content broken down in detail by weekly class schedule (syllabus)	<p>Lectures: / Seminars:</p> <ol style="list-style-type: none"> Introductory lecture - introduction course content, literature and obligations of students; The diversity and evolution of insects. (2 hours) The anatomy and physiology of the different orders of insects. (2 hours) Systematics of Hexapoda with special reference to: Collembola, Protura, Diplura, Ephemeroptera, odont, Plecoptera, Blattodea, Mantodea, Matophasmodea, Orthoptera, Isoptera, Hemiptera, Neuroptera, Megaloptera, Siphonaptera, Hymenoptera, Strepsiptera. (2 hours) Systematics of Hexapoda with special reference to: Coleoptera, Diptera, Mecoptera, Trichoptera, Lepidoptera. (2 hours) Social insects. (1 hour) Field collection, preservation and identification of insects; Entomological collections. (2 hours) The economic importance of insects; Applied Entomology. (2 hours) Protection of insect biodiversity. (2 hours) 					
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 checked="" type="checkbox"/> partial e-learning <input type="checkbox"/> field work		<input checked="" type="checkbox"/> independent assignments <input checked="" type="checkbox"/> multimedia <input type="checkbox"/> laboratory <input type="checkbox"/> work with mentor <input type="checkbox"/> (other)			
Student responsibilities	Students' presence in the amount of at least 70% of scheduled lectures, student seminar work.					

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	1	Research		Practical training	
	Experimental work		Report		(Other)	
	Essay		Seminar essay	0,5	(Other)	
	Tests		Oral exam		(Other)	
	Written exam	0,5	Project		(Other)	
Grading and evaluating student work in class and at the final exam	Grading will be conducted on the basis of student seminar work and the final written exam.					
Required literature (available in the library and via other media)	Title			Number of copies in the library	Availability via other media	
	P.J. Gullan and P.S. Cranston (2014) The Insects: An Outline of Entomology, Fifth Edition. John Wiley and Sons, Ltd., Chichester, West Sussex. xxv + 595 pp.					
	Habdija, I., Primc Habdija, B., Radanović, I., Vidaković, J., Kučinić, M., Špoljar, M., Matoničkin, R. & Miliša, M. (2004): Protista-Protozoa i Metazoa-Invertebrata. Funkcionalna građa i praktikum.-Meridijani, Samobor.			3		
	Matoničkin, I. Habdija, I., Primc Habdija, B. (1998): Beskralježnjaci, Biologija nižih avertebrata, Školska knjiga, Zagreb.			3		
	Matoničkin, I. Habdija, I., Primc Habdija, B. (1999): Beskralježnjaci, Biologija viših avertebrata, Školska knjiga, Zagreb.			3		
Optional literature (at the time of submission of study programme proposal)	<p>Kučinić, M. & Plavac, I., (2009) Danji leptiri - Priručnik za inventarizaciju i praćenje stanja. Državni zavod za zaštitu prirode, 41 str., Zagreb.</p> <p>Kučinić, M., Mihoci, I. & Delić, A., (2014) Leptiri oko nas. Školska knjiga, 184 str., Zagreb.</p> <p>Durbešić, P. (1988): Upoznavanje i istraživanje kopnenih člankonožaca. Mala ekološka biblioteka, knjiga 4, Zagreb</p>					
Quality assurance methods that ensure the acquisition of exit competences	<ul style="list-style-type: none"> -Taking attendance of students during classes. -Students' survey evaluation of teacher's work. -Feedback from graduated students on the relevance of the course content. 					
Other (as the proposer wishes to add)	Consultations are taking place according to the agreement with the students or by e-mail: spuljas@pmfst.hr					