

<b>Study Programme : BSc in Biology</b>				
Degree level: Bachelor degree				
<b>Course Title: Entomology</b>				
<b>Professor: dr Ivo Karaman, dr Snežana Radenković</b>				
<b>Required/Elective Course: Elective</b>				
<b>Number of ECTS: 6</b>				
<b>Prerequisites:</b> passed exams “Morphology and systematics of invertebrates” and “Filed trip I (Entomology)”				
<b>Course Objective:</b> Introduction to morpho-anatomy, physiology, biology and diversity of insects. Become familiar with key characters important in phylogeny and classification of insects and the basic diagnostic features of main groups. Students gain knowledge of general characteristics of the dominant insect's orders, their morpho-anatomy, development, ecological adaptations, life cycles and strategies, distribution, diversity and typical representatives.				
<b>Course Outcome:</b> Achieving theoretical and practical knowledge in general entomology.				
<b>Course Content:</b>				
<i>Theoretical part</i> Origin and evolution of insects. General features and morpho-anatomy. Thorax and locomotion. Abdomen. Insects anatomy – digestive system, digestion process and nutrition, excretion, haemolymph and circulatory system, fat body, respiration, nervous system, endocrine system and senses. Reproduction, development and metamorphosis. General characteristics of “Apterygota”, Palaeoptera, Polyneoptera, Paraneoptera, primitive Holometabola, Coleoptera, Strepsiptera, Siphonaptera, Diptera, Hymenoptera, Mecoptera, Trichoptera and Lepidoptera. Insects and plants. Aquatic insects.				
<i>Practical part</i> Practical exercises includes studies on morphology and anatomy of insects, typical representatives of following orders Diplura, Protura, Collembola, Archaeognatha, Zygentoma; Ephemeroptera, Odonata, Isoptera, Blattodea, Mantodea, Phasmatodea, Orthoptera, Dermaptera, Phthiraptera, Thysanoptera, Hemiptera, Neuropterida, Siphonaptera and Trichoptera. Diversity of Coleoptera, Hymenoptera and Lepidoptera fauna. Selected representatives of order Diptera and the most important families. General principles of insect taxonomy.				
<b>Reading List:</b>				
1. Chapman, R.F. (1988): The Insects, Structure and Function, (fourth edition). Cambridge University Press, Cambridge.				
2. Grimaldi, D., Engel M.S. (2005): Evolution of the Insects. Cambridge University, Cambridge.				
3. Tanasijević, N., Simova-Tošić, D. (1987): Opšta entomologija. Naučna Knjiga, Beograd.				
4. Tanasijević, N., Simova-Tošić, D. (1987): Posebna entomologija. Naučna Knjiga, Beograd.				
<b>Total hours:</b>				
Lectures: 2	Practicals: 2	Other:	Student research work:	
<b>Methods of instruction:</b>				
Video presentation, dissections and dry mounts, entomological collections.				
<b>Assessment (maximum number of points 100)</b>				
<b>Requirements</b>	<b>points</b>	<b>Final exam</b>	<b>points</b>	
Active participation in lectures		Practical exam	60	
Active participation in practicals		Oral exam		
Test(s) or				
Pre-exam testing	40			