

Study Programme: Biology / Ecology			
Course Unit Title: General Zoology			
Course Unit Code: OB004			
Name of Lecturer: Mladen Horvatic, PhD			
Type and Level of Studies: Bachelor of Science in Biology			
Course Status (compulsory/elective): compulsory			
Semester (winter/summer): winter			
Number of ECTS Allocated: 6			
Prerequisites: none			
Course Objective: The aim of this course is to provide students with an introduction to the basic principles of Zoology. This course is designed to provide an understanding of the origins of the animal world and elements of their functional morphology and anatomy by studying the basic lineages of invertebrata and vertebrata in an evolutionary context.			
Course Outcome: Students will be able to understand the basic principles of animal classification and to describe structural organization of main animal phyla. They will be trained to use zoological terminology and to understand the relationships between structures and functions in animals. Students will be able to discuss and demonstrate the phylogenetic survey of animal organic systems.			
Course Content: <i>Theoretical part</i> Diversity of living world and basic principles of classification; Main characteristics and classification of animals, animal diversity and their origins; Animal tissue types (the structure and function of epithelial, connective, muscle and nervous tissue); Comparative evolutionary overview of animal organ systems and their functions. <i>Practical part</i> Getting to know about optical devices (binocular loupe, microscope and microscopic technique). Animal tissues: epithelial (mammal kidney and small intestine cross section), connective (bone cross section, human blood smear and frog blood smear), muscle (frog intestine cross section, mammal tongue cross section), nervous (mammal cerebellum cross section). Organ systems: Large roundworm integument, dog skin cross section; European lancelet cross section: notochordal structure, amphicoelous vertebrae structure, mammal skeletal system; Earthworm ventral nerve cord, European lancelet nerve cord, cross section through the eye of the garden snail; Vertebrate small intestine structure; Mammal lung; Structure of human kidney; Lancet liver fluke reproductive system.			
Reading List: Radović I., Petrov B. 2005. Raznovrsnost života 1. Struktura i funkcija, Biološki fakultet Univerziteta u Beogradu Banovački Z., Čabrilo B. Parktikum (Radna sveska). Miller S.A., Harley J.B. 2009. Zoology, McGraw-Hill Education, Boston Springer J.T., Holley D. 2013. An Introduction to Zoology-Investigating the Animal World, J&B Pub., Burlington			
Total hours:	Lectures: 2	Practical: 2	
Methods of instruction: Lectures consist of oral and video presentations. Practical research includes microscopic study of selected slides and study of prepared fixed material and live specimens.			
Assessment (maximum number of points 100)			
Pre-exam requirements	points	Final exam	points
Written quiz 1	5	Practical exam	20
Written quiz 2	5	Final written exam 1	30
Written quiz 3	5	Final written exam 2	30
Written quiz 4	5	Oral exam - elective	