Study Programme : BSc in Ecology

Degree level: Bachelor degree

Course Title: Zoology of Chordates

Professor: dr Ester Popović,

Required/Elective Course: Required

Number of ECTS: 7

Prerequisites: General Zoology and Field trip I

Course Objective: This course provides a basic knowledge in histological and morpho-anatomical characteristics of Chordates as well as in their development, clasiffication and diversity.

Course Outcome: Students are expected to become familiar and to understand Chordates zoology as a basis for overcoming the contents of phylogeny, behaviour and ecology courses.

Course Content:

Theoretical part

Structure of vertebrat ephitelium, connective, muscle and nervous tissue. Chordate origins and phylogeny. Chordate body organization, Amphioxsus. Vertebrate origin. General characteristic of Vertebrata and their organ systems: integument, skeleton, muscular system, nervous system, circulatory system, digestive system, respiratory system and urogenital system. Organ system, development, habitat and classification of Haemichordata, Tunicata and Vertebrata: Ciclostomata, Pisces, Amphibia, Reptilia, Aves and Mammalia

Practical part

Microscopic study of ephitelium, connective, muscle and nervous tissue. Characteristic of Urochordata and Cephalochordata. Comparative vertebrate axial, cranial and appendicular skeleton. Study of Pisces, Amphibia-Anura, Reptilia-Sauria, Aves and Mammalia organ systems.

Reading List:

1. Kalezić, M. (1998): Hordata, skripta. Biološki fakultet Univerziteta u Beogradu, Beograd.

2. Matavulj, M. (2004): Tkiva, skripta. Prirodno-matematički fakultet, Univerzitet u Novom Sadu, Novi Sad.

3. Radovanović, M. (1965): Zoologija II, Sistematika životinja. Naučna knjiga, Beograd.

4. Šorić, V. (1997): Morfologija i sistematika hordata. Kragujevac.

5. Pough, F.H, C.M Janis, J.B. Heiser. 2009. Vertebrate Life. 8th ed. Bennjamin Cummings. Toronto. 688pp.

Total hours:					
Lectures: 4	Practicals: 3	Other:	Student research work:		

Methods of instruction:

Theoretical lectures supplemented with video. Laboratory exercises include observations of prepared histological slides, osteological specimens and dissections.

Assessment (maximum number of points 100)					
Requirements	points	Final exam	points		
Active participation in lectures		Practical exam	14		
Active participation in practicals		Oral exam	46		
Test(s) or	30				
Pre-exam testing	10				