XCourse Information Sheet

University: University of Prešov in Prešov

Faculty: Faculty of Humanities and Natural Sciences

Code: 2EKO/ZOO1X/22 Title of Course: Zoology 1

Form of Study: lectures, laboratory classes

Number of contact hours:

per week: 2 lectures, 2 laboratory classes

per level/semester: 20 lectures, 20 laboratory classes, 50 home work, 50 self study, 40 identification, study and documentation of invertebrates in the natural environment **Method**: physical presence/traditional classrooms

Number of credits: 6

Semester: *4. semester/2. study year*

Degree/Level: *bachelor*

Prerequisities:

Grading Policy (Assessment/Evaluation):

Attendance at seminars is mandatory. A student can have a maximum of 2 absences justified on the basis of a medical certificate. In the case of justified absence, the student will receive substitute assignments or attend consultations. In case of unjustified absences or a larger number of absences, the student will not be granted credits.

The evaluation of the student's study results within the study subject will be performed as follows:

a) continuous control of study results during the teaching part of the semester (animal identification, laboratory protocols, seminar work, 2 continuous written checks) with a minimum success rate of 50%,

(b) a written examination during the examination period.

The success criteria (percentage expression of results in the evaluation of the exam from the subject) are for the classification levels as follows:

a) A - 100.00 - 90.00%

b) B - 89.99 - 80.00%

c) C - 79.99 - 70.00%

d) D - 69.99 - 60.00%

e) E - 59.99 - 50.00%

f) FX - 49.99 and less%

Aims and Objectives:

By completing the course, the student will demonstrate knowledge related to invertebrates at various taxonomic levels (their morphology, ecology, ontogenesis and systematic classification) with an overlap in applied biological, ecological and environmental sciences and related natural sciences that are relevant to the study of living nature as an integrated whole, ecology, protection and use of nature or environmental education.

The student demonstrates the ability to:

- know the individual taxonomic groups of invertebrates,

- describe the morphology, anatomy, ecology of individual taxonomic groups of invertebrates,

- give examples of species of specific taxonomic groups of invertebrates,

- use theoretical knowledge in the study of particular taxonomic groups and cenoses of different habitats,

- know selected representatives of invertebrates and include them in the zoological system,

- explain the importance of specific groups and representatives of invertebrates in nature and in relation to humans,

- use knowledge of invertebrates to solve tasks in the fields of biology and ecology.

After completing the course, the students have ability for their further education and are able to obtain and interpret new information in the field of invertebrates zoology. Based on them, they are able to make the right decisions in solving ecological and environmental problems.

Syllabus/Indicative Content:

1. Definition of zoology, its specialized and applied fields. Zoological system, phylogeny, evolution.

2. Taxa, binomial nomenclature. Defining animals. Chordates. Protozoa.

3. Choanozoa, Holozoa and Metazoa.

Position in the zoological system, phylogeny, taxonomy, morphology, ecology, importance of taxa:

4. Porifera. Eumetazoa. Ctenophora. Placozoa.

5. Cnidaria. Acoelomorpha. Myxozoa. Mesozoa.

6. Bilateral and Eubilateral. Plathelminthes - Catenulidea, Turbellaria, Monogenea,

Trematoda, Cestoda.

7. Rotifera. Acanthocephala. Gastrotricha. Chaetognatha. Gnathostomulida.

8. Nemertini. Sipuncula. Mollusca.

9. Annelida. Echiuridea. Polychaeta - Scolecida, Canalipalpiata, Aciculata. Oligochaeta. Hirudinea. Pogonophora.

10. Ecdysozoa. Cephalorhyncha. Nematomorpha. Nematode. Panarthropoda. Onychophora. Tardigrad.

11. Arthropoda. Pycnogonida. Euchelicerata. Mandibulata. Miriapoda. Pancrustacea. Crustacea.

12. Euchelicerata. Myriapoda. Insect.

13. Tentaculata - Kamptozoa, Bryozoa, Phoronida, Brachiopoda. Echinodermata - Crinoida, Eleutherozoa.

Suggested readings:

Hickman C.P. et al., 2015: Animal diversity. McGraw-Hill.

Pechenik J.A., 2015: BIOLOGY OF THE INVERTEBRATES. McGraw-Hill.

Schierwater B., DeSalle R., 2022: Invertebrate zoology. A tree of Life Approach. CRC Press. Brusca R.C., Brusca G.J., 2003: Invertebrates. Sinauer Assoc. Publ.

Hickman C.P. et al., 2017: INTEGRATED PRINCIPLES OF ZOOLOGY. McGraw-Hill.

Language of Instruction: slovak, english

Other course information:

Grading	history

	0	C	D	E	FX
12%	15%	14%	12%	19%	27%

Lecturer/Instructor:

doc. Mgr. Peter Manko, PhD., lecturer, examining teacher, laboratory classes RNDr. Michal Rendoš, PhD., lecturer (selected lectures), examining teacher, laboratory classes RNDr. Radoslav Smoľák, PhD., lecturer (selected lectures)

Last update: 31/ March 2025

Approved by: