

Course Information Sheet

University: <i>University of Prešov in Prešov</i>	
Faculty: <i>Faculty of Humanities and Natural Sciences</i>	
Code: <i>2EKO/ENTOMX/22</i>	Title of Course: <i>Ecology and biodiversity of insects</i>
Form of Study: <i>lectures, laboratory and field practices</i> Number of contact hours: <i>per week: 2 lectures, 1 laboratory and field practices</i> <i>per level/semester: 20 lectures, 10 laboratory and field practices, individual field work-identification, study and documentation of insects in the natural environment 30, seminar work 30, self - study 30.</i> Method: <i>physical presence/traditional classrooms</i>	
Number of credits: <i>4</i>	
Semester: <i>2. semester/1. study year</i>	
Degree/Level: <i>2. master</i>	
Prerequisites:	
Grading Policy (Assessment/Evaluation): <i>Attendance at seminars is mandatory. A student can have a maximum of 1 absence justified on the basis of a medical certificate. In 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.</i> <i>The evaluation of the student's study results within the study subject will be performed as follows:</i> <i>continuous control of study results during the semester (field and laboratory protocols, seminar work, 2 written checks) with a minimum success rate of 50%.</i> <i>The success criteria (percentage expression of results) are for the classification levels as follows:</i> <i>a) A - 100.00 - 90.00%</i> <i>b) B - 89.99 - 80.00%</i> <i>c) C - 79.99 - 70.00%</i> <i>d) D - 69.99 - 60.00%</i> <i>e) E - 59.99 - 50.00%</i> <i>f) FX - 49.99 and less%</i>	
Aims and Objectives: <i>By completing the course, the student will demonstrate knowledge of biodiversity and insect ecology. He knows common representatives and their adaptations to the environment. He can independently describe the basic biocenoses, name and describe insect communities of different ecosystems and habitats.</i> <i>The student demonstrates the ability to:</i> <ul style="list-style-type: none"> - take samples of insects using methods suitable for each taxonomic and ecological group, - distinguish between ecological and taxonomic groups of insects, - know the factors influencing insect diversity, - determine (calculate) and interpret insect diversity. <i>After completing the course, students have the ability to continue their education and are able to obtain and interpret new information in the field of ecology and biodiversity of insects. Based on them, they are able to make creative and original decisions in solving ecological and environmental problems related to insects and their protection, even with incomplete or limited information. The conclusions obtained by a separate study of the issue of ecology and</i>	

biodiversity of insects can clearly and comprehensibly communicate and justify to non-experts and the professional public.

Syllabus/Indicative Content:

1. *The position of insects in the zoological system. Phylogeny, taxonomy, morphology of insects. Biodiversity and ecology of insects in general.*

Biodiversity and ecology, collection and study methods, threat and protection of individual Insecta classes:

2. *Ephemeroptera, Plecoptera, Trichoptera.*

3. *Megaloptera, Raphidioptera, Odonata, Neuroptera.*

4. *Hymenoptera, Diptera.*

5. *Mecoptera, Lepidoptera.*

6. *Coleoptera.*

7. *Heteroptera, Orthoptera.*

8. *Mantodea, Phasmida.*

9. *Blattodea, Auchenorrhyncha, Dermaptera.*

10. *Siphonaptera, Anoplura, Psocoptera.*

11. *Mallophaga, Thysanura, Sternorrhyncha, Strepsiptera.*

12. *Entomocenoses of Slovakia.*

13. *Applied entomology.*

Suggested readings:

PRICE, W.P.: Insect ecology 3rd edition. Wiley, New York, 1997.

GULLAN, P. J. - CRANSTON, P. S.: The insects: an outline of entomology 4th edition. Blackwell Publishing, Oxford, UK, 2010.

LANCASTER, J., BRIERS, R.A. (ed.): AQUATIC INSECTS. Challenges to Populations. 2007.

LANCASTER, J., DOWNES, B.J.: Aquatic entomology. Oxford, 2013.

GRIMALDI, D. ENGEL, M.S.: Evolution of the Insects. Cambridge, 2005.

ROBINSON, W.H.: Urban Insects. Cambridge, 2005. PRICE, W.P.: Insect ecology 3rd edition. Wiley, New York, 1997.

Identification keys.

Language of Instruction: *Slovak, English*

Other course information:

Grading history

9 students

A	B	C	D	E	FX
89%	11%	0%	0%	0%	0%

Lecturer/Instructor:

doc. Mgr. Peter Manko, PhD., lecturer, examining teacher, laboratory classes

RNDr. Beáta Baranová, PhD., lecturer, examining teacher, laboratory classes

Ing. Jozef Oboňa, PhD., lecturer, examining teacher, laboratory classes

Last update: 31/ March 2025

Approved by: