Course Information Sheet

University: University of Prešov in Prešov

Faculty: Faculty of Humanities and Natural Sciences

Code: 2EKO/ENTOMEX/22Title of Course: Entomological methods

Form of Study: lectures, seminars/practices

Number of contact hours:

per week: 2 lectures, 2 seminars/practices

per level/semester: 20 lectures, 20 seminars, 60 seminar work hours, 50 self study hours *Method*: physical presence/traditional classrooms

Number of credits: 5

Semester: 1. semester, 2. semester /1. study year, 2. study year

Degree/Level: 3. PhD.

Prerequisities:

Grading Policy (Assessment/Evaluation):

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 semester (seminar work) with a minimum success rate of 50%;
- B. final exam.

The success criteria (percentage expression of results) 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:

After completing the course, students have systematically mastered the methods of insect ecology study corresponding to the current state of knowledge in the field and the acquisition of theoretical and practical skills necessary for the use of these methods in their own research. After completing the course, students are able to conceive, construct, implement and, after critical analysis, appropriately modify the design and methods of insect study. As a result, they will be able to contribute to the expansion of scientific knowledge of insect ecology through their own original research and implementation of a set of publications worthy of peer-reviewed publishing within the topic of the dissertation.

Syllabus/Indicative Content:

1. Reason and practical aspects of insect research. Why do we study insects?

2. Types of entomological studies.

3. Insect ecology research planning.

4. Field methods 1 - active methods: examples, advantages, disadvantages, use, practical examples.

5. Field methods 2 - passive methods: examples, advantages, disadvantages, use, practical examples.

6. Field methods 3 - "responsive trapping": examples, advantages, disadvantages, use, practical examples.

7. Classification, identification and taxonomy. Traditional, modern and combined methods. Specifics of selected taxonomic groups.

8. Sampling strategies: examples, advantages, disadvantages, use, practical examples.

9. Advanced measurements and analyzes of environmental variables and environmental heterogeneity in the context of insect ecology research.

10. "Mark-recapture" methods in insect ecology research.

11. Insect monitoring - advanced monitoring methods for research, protection and applied entomology.

12. Advanced research methods of populations and communities - examples, advantages, disadvantages, applications, practical examples.

13. Results, analysis and interpretation. Biological meaning of results, errors of interpretation, methodological limitations.

The individual topics of the syllabus (content) of the course are composed of a general part and a part dedicated to specific groups according to the topic of the dissertation.

Suggested readings:

MILLAR, I.M. et al.: Collecting and Preserving Insects and Arachnids. Pretoria, 2000.

HÄUSER, C.L., RIEDE, K.: Field methods for inventorying insects. Cambridge University Press, 2015.

HENDERSON, P.A.: Practical Methods In Ecology. Oxford, 2003.

KREBS, C.J.: Ecological Methodology. 1998.

GILLMAN, M.: An Introduction to Mathematical Models in Ecology and Evolution. Time and Space. Milton Keynes, 2009.

HANDERSON, P.A.: Ecological Methods. In: ENCYCLOPEDIA OF LIFE SCIENCES. John Wiley & Sons, 2001.

Language of Instruction: slovak, english

Other course information:

Grading history

А	В	С	D	E	FX
0%	0%	0%	0%	0%	0%

Lecturer/Instructor:

doc. Mgr. Peter Manko, PhD., lecturer, examining teacher, seminars Ing. Jozef Oboňa, PhD., seminars

Last update: 31/ March 2025

Approved by: