Course Information Sheet

University: University of Pročew in Pročew						
Faculty · Faculty of Humanities and Natural Sciences						
Code: 2FKO/BIOD/22	Title of Course: Biodiversity					
Form of Study: lectures, seminares						
Number of contact hours:						
per week: 2 lectures, 1 seminares						
per level/semester: 20 lectures, 10 seminars, independent field work - cognition, study and						
documentation of biodiversity in the natural environment 30 in el. application (e.g.						
iNaturalist),30 seminar work hours, 30 self study hours						
In three field and subsequent laboratory exercises, the student completes the collection,						
processing and analysis of biodiversity samples (field, laboratory).						
Method: physical presence/traditional classrooms						
Number of credits: 4						
Semester: 1. semester /1. study year						
Degree/Level: 2						
Prerequisities:						
Grading Policy (Assessment/Evaluation)	:					
Presence at seminars is mandatory. A student can have a maximum of 1 absence justified on on the basis of a medical certificate. In the absence of the student will receive substitute tasks, respectively, araduates consultation. In case of unjustified absence or a large number						
of absences a student will not arant 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 semester (seminar work) with a minimum success rate of 50%;						
B. final exam.						
The success criteria (percentage expression follows:	n of results) are for the classification levels as					
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 of the mechanisms that						

By completing the course, the student will demonstrate knowledge of the mechanisms that create, maintaining and threatening biodiversity. Can describe global patterns of diversity on Earth, etc. environmental phenomena that lead to them. Can describe different levels of diversity (genetic, species, ecosystem). The student is acquainted with the expected trends in the evolution of biodiversity and extinctions in the Earth's past and can combine this knowledge with knowledge of the present environmental crisis and a possible six major extinctions. The student can explain the possible links between biodiversity and community stability. The student has practical skills enabling beta diversity to be used as a nature conservation tool. The student has knowledge of the basics diversity, diversity and balance indices and can apply them for comparison research groups in different localities. The student is acquainted with the concept of functional diversity and its role in community ecology. The student demonstrates the ability to:

- diversity sampling appropriate to each taxonomic and ecological group of organisms, in different types of habitats

- distinguish between ecological and taxonomic groups of diversity,
- knows the factors influencing diversity,
- *identify* (*calculate*) *and interpret diversity at different levels and apply it for purposes nature protection*

After completing the course, students have the ability to continue their education and are able to acquire and interpret new biodiversity information. Based on them, they can solve it ecological and environmental problems related to the diversity of life and its protection creatively and make original decisions even with incomplete or limited information. The conclusions obtained by a separate study of biodiversity issues are clear and understandable communicate and justify to people and the professional public.

Syllabus/Indicative Content:

- 1. Diversity of life, its origin and evolutionary past
- 2. Biodiversity levels, global patterns of diversity on Earth
- 3. Mechanisms of biodiversity formation, its evolution
- 4. Island biogeography, neutral biodiversity theory, applications for landscape planning.
- 5. Use of beta diversity in practical nature protection.
- 6. Indices of diversity, equilibrium, diversity, their use in community ecology.
- 7. Functional biodiversity and its use in practice.
- 8. Biodiversity and community stability
- 9. Reasons for endangering biodiversity in Slovakia and in the world.
- 10. Biodiversity protection.
- 11. Biodiversity and ecosystem services.

Suggested readings:

TOWNSEND, R. C., BEGON, M., HARPER, L. J.: Základy ekologie (z anglického originálu: Essential of Ecology). 1. české vyd., Univerzita Palackého Olomouc: Blackwell Publishing, 2010,

BEGON, M., TOWNSEND, R.C. Ecology. From individuals to ecosystem. 5th edition, Wiley & Sons. 2021.

WILSON, E.O. Rozmanitost života. Lidové noviny. 1995.

PRIMACK, R.B., Kindlmann, P., Jersáková, J. Biologické principy ochrany přírody; Portál, Praha. 2001.

MEADOWSOVÁ, D. Meze růstu, Argo, 1992.

Language of Instruction: *slovak*

Other course information:

Grading history

А	В	С	D	E	FX

Lecturer/Instructor:

doc. Mgr. Peter Manko, PhD., lecturer, examiner, examining teacher, seminars

doc. Mgr. Martin Hromada, PhD., lecturer, examiner, examining teacher, seminars

Last update:13.January 2022

Approved by: