## **Course Information Sheet**

University: University of Prešov in Prešov					
Faculty: Faculty of Humanities and Natural Sciences					
Code: 2EKO/BPOP/22	Title of Course: Biological principles of nature				
	protection				
Form of Study: lectures, seminares	,				
Number of contact hours:					
per week: 2 lectures, 1 seminare					
per level/semester: 20 lectures, 10 seminars, 60 seminar work hours, 60 self study hours					
Method: physical presence/traditional classrooms					
Number of credits: 5					
Semester: 3. semester /2. study year					
Degree/Level: 2					
Prerequisities:					
Grading Policy (Assessment/Evaluation):					
Presence at seminars is mandatory. A student can have a maximum of 2 absences justified on					
on the basis of a medical certificate. In the absence of the student will receive substitute					
tasks, respectively graduates consultation. In case of unjustified absence or a large number					
of absences, a student will not grant credits.					
The evaluation of the student's study resu	Ilts 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	on 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, the student is	s able to explain the importance of biological and				
ecological knowledge in practical nature	conservation. The student has knowledge of				
causation, which lead to species extinction	n, he knows the background of extinction. Knows the				
characteristics of species, which lead to the	hem susceptibility to extinction. The student knows				
the importance of island biogeography fo	r nature protection, application in landscape				
planning. Understands the problems of sm	nall populations, inbreeding, outbreeding, genetic				
drift. The student has knowledge of hot sp	ots of diversity and endemism both on a global and				
European and Slovak scale. After complete	ting the course student has practical skills, which				
enable it to prioritize the protection of species and ecosystems. Can apply knowledge of					

ecosystem services.

## Syllabus/Indicative Content:

1. Interdisciplinary approach to nature conservation biology. Why we need to know nature conservation biology? Prioritization.

2. What is biological diversity? Species diversity. Genetic diversity. Diversity communities and

ecosystems. Biodiversity measurement ...

3. Distribution of biological diversity on Earth. How many species live in the world.

4. Island biogeography and relation to biodiversity and protection.

5. Extinction - past and present. Causes of extinction.

6. Threat to biological diversity. Causes of extinction.

7. Habitat loss. Habitat fragmentation. Habitat degradation and pollution. Excessive use of resources. Invasive species. Diseases.

8. Protection at the level of species and populations. Small populations. Loss of genetic variability.
Demographic fluctuations. Catastrophs and changes in life. environment. Extinction whirls.
9. Analysis of population viability. Metapopulations, their dynamics. Creating new populations.

10. Rules of successful protection. Establishing new populations.

11. Protection at Community level. Size of protected areas.

12. Biocorridors. Landscape ecology and design.

13. Ecosystem services.

Suggested readings:

RICHARD B. PRIMACK, PAVEL KINDLMANN, JANA JERSÁKOVÁ: Biologické principy ochrany přírody. Portál. 2001

RICHARD B. PRIMACK, PAVEL KINDLMANN, JANA JERSÁKOVÁ: Úvod do biologie ochrany přírody. Portál. 2011

FILIP KOLÁŘ A KOL. Ochrana přírody z pohledu biologa. Dokořán, 2012

Language of Instruction: slovak, english

**Other course information** 

Grading history

A	В	С	D	E	FX

Lecturer/Instructor:

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

Last update: 13. January 2022

Approved by: