Course code:	06-EMS-ECOEN-SP1 / 06-EMS-ECOEN-SP2	Plan position:	
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1. INFORMATION ABOUT THE COURSE

A. Basic information

Name of course	Ecology and environment protection
Field of studies	
Level of studies	
Profile of studies	
Form of studies	Stationary
Specialty	
Unit responsible for the field of studies	Faculty of Animal Breeding and Biology, Department of Biology and Animal Environment
Name and academic degree of teacher(s)	Bogusław Chachaj Ph.D.
Introductory courses	
Introductory requirements	

B. Semester/week schedule of classes

Semester	Lectures (W)	Auditorium classes	Laboratory classes	Project classes	Seminar	Field classes	Number of ECTS points
	` '	(Ć)	(L)	(P)	(S)	(T)	-
Winter /		30					6
summer		30					6

2. LEARNING OUTCOME

No.	Learning outcomes description	The reference to the learning outcomes of specific field of study	The reference to the learning outcomes for the area
	KNOWLEDGE		
W1	The student has knowledge of the structure and functioning of ecosystems. The student knows the relationship between structure and function at the level of individual organisms and populations. The student has knowledge of the forms of nature protection, biodiversity and reintroduction.		
W2	The importance of soil, water and air pollution and protection; the impact of pollution on living organisms and technical and biological methods of monitoring environmental contamination SKILLS		
T T 1			
U1	The student can properly assess the state of the environment in accordance with the requirements of a		

	specific species. The student is able to design an ecological corridor and field plantings.	
U2	Monitor the state of contamination of the soil, water and forest environment; indicate and select appropriate soil remediation methods; propose remedial actions in the degraded environment.	
	SOCIAL COMPETENCES	
K1	The student understands the need for constant and systematic updating of knowledge in the field of ecology and shows an ethical attitude towards the environment and the organisms in which they live.	

3. TEACHING METHODS

Exercises, demonstrations, and observation of invertebrates with binoculars.

4. METHODS OF EXAMINATION

Presentation

5. SCOPE

Laboratories Ecological factors. Ecological groups of soil organisms, their acquisition and qualitative and quantitative assessment. Herbaceous plants, lichens and animals as habitat bioindicators. Management of natural resources in aquatic ecosystems on the example of fish. Nature conservation. Ecological corridors and mid-field plantings, the ability to design them.	Lectures	
Contemporary problems of environmental protection. Water pollution and its impact on the environment. Eutrophication of lakes. Soil pollution and its impact on the environment. Air pollution and its impact on the environment. Natural resources and their use. The importance of aquaculture for the economy, problems and threats.		qualitative and quantitative assessment. Herbaceous plants, lichens and animals as habitat bioindicators. Management of natural resources in aquatic ecosystems on the example of fish. Nature conservation. Ecological corridors and mid-field plantings, the ability to design them. Contemporary problems of environmental protection. Water pollution and its impact on the environment. Eutrophication of lakes. Soil pollution and its impact on the environment. Air pollution and its impact on the environment. Natural resources and their use. The importance of aquaculture for the economy, problems

6. METHODS OF VERIFICATION OF LEARNING OUTCOMES

LEADNING			Form of a	ssessment		
LEARNING OUTCOME	Oral examination	Written exam	Colloquium	Project	Presentation	
W1					X	
W2					X	
U1					X	
U2					X	
K1					X	

7. LITERATURE

Basic literature	Krebs Charles J. 2014. Ecology: The Experimental Analysis of Distribution
	and Abundance. Pearson Education Limited.
Supplementary	Hill Pamela 2017. Environmental Protection: What Everyone Needs to Know.
literature	Oxford University Press

8. TOTAL STUDENT WORKLOAD REQUIRED TO ACHIEVE EXPECTED LEARNING OUTCOMES EXPRESSED IN TIME AND ECTS CREDITS

S	Student workload— number of hours	
Classes conducted under a	Participation in classes indicated in point 1B	30
direct supervision of an academic teacher or other persons responsible for classes	Supervision hours	5
	Preparation for classes	30
Student's own work	Reading assignments	40
	Other (preparation for exams, tests, carrying out a project etc)	45
Total student workload		150
	Number of ECTS points	6