## Study program: Class Teacher Education, Preschool Teacher Education

Type and level of studies: Bachelor studies, first cycle degree program

# Course unit: Ecology

Teacher in charge: Jelena M. Mladenović, PhD, Assistant Professor

## Language of instruction: English

### Course status: Elective

**ECTS:** 6

Semester: Winter Semester or summer semester

# Course unit objectives

Students will understand the basic laws and cause-effect relationships in the environment, the consequences of human behavior and the impact of human lifestyles on the environment locally and globally, as well as mechanisms and activities in the environmental protection system.

# Learning Outcomes of Course unit

Students will be able to:

- Define basic environmental concepts;
- Explain cause-and-effect relationships in the environment;
- Recognize the causes and the consequences of endangering nature;
- Assess the importance of biodiversity for the survival of life on Earth;
- Propose activities in protection, restoration and improvement of the environment.

## **Course unit contents**

Theoretical classes:

The concept and significance of ecology; Environment, habitat; Ecological factors; Adaptations; Population; Ecological community; Ecological niche; Producers, consumers and decomposers; Food chains and food networks; Ecosystems, structure and organization; Biomes; Biosphere, atmosphere, hydrosphere, lithosphere; Ecosystem diversity (terrestrial and aqueous); Anthropogenic ecosystems (city, park, agroecosystem); Energy sources; Pollution of air, water, soil; Biomonitoring; Diversity of the living world – biodiversity; Nature conservation, Natural Resources of Serbia. *Practical teaching*:

Field research, observation of nature, ecological diary, demonstrations of practical works, activities in nature, ecological activities, natural corner in kindergarten, bonton in nature, ecological footprint, carbon footprint, integration of ecological contents in the activities of educational work with children.

# Literature

Hans Ulrik Riisgard. General Ecology: Outline of contemporary ecology for university students, 2<sup>nd</sup> edition. Bookboon, 2018.

F. Stuart Chapin, III, Pamela A. Matson and Peter M.Vitousek. *Principles of Terrestrial Ecosystem Ecology*, Second Edition. Springer New York Dordrecht Heidelberg London, 2011.

Robert Steele. Environmental protection. UNESCO. 2010.

Global Biodiversity. UNEP. Secretariat of the Convention on Biological Diversity. Montreal, Canada. 2010.

Additional literature

Selected educational films and content from the Internet

Number of active	_			
Lectures: 30	Practice: 15	Other forms of classes: mentoring system	Independent work: project work, presentations	Other classes

#### **Teaching methods**

Interactive classes (individual and in small groups), discussions, workshops, problem solving and implementation of research activities, presentations and mentoring.

Examination methods (maximum 100 points)						
Exam prerequisites	No. of points	Final exam	No. of points			
Student's activity during lectures	10	written examination	40			
Practical classes/tests	30	oral examination	-			
Seminars/homework	10					
Project	10					

Grading system					

Grade	Number of points	Description
10	91-100	Excellent
9	81-90	Exceptionally good
8	71-80	Very good
7	61-70	Good
6	51-60	Passing
5	≤50	Failing