Level: Bachelor

Course title: Fundamentals of Biological Principles in Environmental Protection

Status: obligatory

ECTS: 9

Requirements: none

Learning objectives

Introducing students to the basic biological components and processes in the environment, including the basic knowledge of cytology, biology and ecology of plants, animals and microorganisms.

Learning outcomes

After successfully completing the course, the student is able to define and explain the relationship between biological response and the other processes in the environment, and to determine the use of biological processes in environmental protection.

Syllabus

Theoretical instruction

Biological principles of environmental protection. Cells - prokaryotic cells of bacteria; animal and plant cells; the cell physiological processes (photosynthesis and respiration; fermentation and degradation; mineralization); reproduction and inheritance. Taxonomy - basic categories. Biodiversity. The relationship between organisms and the environment. Ecological organization levels. Ecosystem productivity. Energy flow and feeding relationships in an ecosystem. Biological processes in the water. Biological processes in soil. The role of biological processes in the environmental protection.

Practical instruction follows the program of theoretical instruction.

Weekly teaching load				Other: -
Lectures:	Exercises:	Other forms of	Student research: -	
3(45)	2(30)	teaching: 2(30)		