Type and level of studies: Bachelor studies

Course name: Environmental protection

Lecturer: Božović R. Milan

Status: Compulsory

ECTS: 6

Attendance Prerequisites: Phytoecology and zooecology

Course aims

Global changes in the biosphere indicate many consequences brought on by the overwhelming influence of the anthropogenic factor. Environmental protection is a multi-, inter- and transdisciplinary field in which ecology, technology, economics, law, politics, and other fundamental disciplines are intertwined.

The main goal of the course is to point out the complexity of the issues addressed within the domain of environmental protection. Following the concept of sustainability, special attention is paid to activities and protective measures against the consequences of degradation, as well as to a rational, controlled and planned use of natural resources and the development of adequate technologies.

Course outcome

The students have gained knowledge about the changes of our planet's ecosystems, occurring due to the anthropogenic influence and about the environmental management system. Analysis, comprehension and understanding of the issues at hand represent an excellent first step towards admitting students to institutions that tackle them.

Course content

Theoretical part:

Introduction to agroecology (agroecology as a science, agroecology in conventional and sustainable agriculture, procedures and environmental consequences in conventional agriculture). Biosphere - ecosystem (biotope, biocenosis, flow of matter, flow of energy). Energy in agroecosystems (the release of solar energy, energy balance and food production, trophic energy balance). Interaction of natural and anthropoecosystems (planning and organization, capacity and management of ecosystems, protection of regional and global biodiversity, sustainable growth). Ecological factors (abiotic and biotic factors, action and reaction). A complex of external conditions (heterogeneity of external conditions, interaction of external condition factors, ecological valence, complexity management). Abiotic factors (edaphic, orographic and climatic factors). Plants and environmental factors (plant nutrition, plant-environment interaction). Soil (soil formation and development processes, soil horizons, physicochemical and

biological characteristics of the soil, organic matter in the soil, soil management). Precipitation, water in

the ground, light. Temperature, wind, fire. Biotic factors (organism, interspecies and intraspecies

relationships, producers, consumers, reducers). Levels of interaction and diversification, genetic resources, environment. Civilizational evolution, environmental degradation and pollution, atmospheric pollution. Noise, soil pollution, hydrosphere pollution. Radiation, food pollution, consequences of pollution. Monitoring, environmental protection measures.

Practical part:

Practical classes are exercises that are in line with theoretical classes.

Literature

- 1. Ђукановић М., Животна средина и одрживи развој, Елит. Београд 1996.
- 2. Јаблановић, М., Јакшић, П., Косановић, К. (2003): Увод у екотоксикологију. Универзитет у Приштини, ПМФ. Косовска Митровица.
- 3. Вујић, А. (2006): Заштита животне средине. Универзитет у Новом Саду, ПМФ, Департман за биологију и екологију. Нови Сад.
- 4. 4. Љешевић М. Животна средина, Универзитет у Београду, Географски факултет, 1999.

1. 1. Demobili II. Milborna epedina, 5 ilibepsiter y beerpady, 1 eerpadeni quadyiter, 1999.					
Number of active classes					Other classes:
Lectures: 3	Practical classes: 2	Other fo	orms of	Students'	
		teaching	g: 0	research work	
Teaching methods					
Theoretical classes, practical classes (laboratory exercises), mandatory fieldwork, consulting.					
Assessment (maximum 100 points)					
Course assignments		oints	Final exam		points
activity during lectures					
Term test/s			oral exam		60
Term paper					
Total					60