

MODULE INFORMATION SHEET

Name of Module Unit	Biology and Ecology
Name in polish language	Biologia i ekologia
Module type	compulsory
Form of studying	full-time day courses
Level of study	Undergraduate course (B.Sc. level)
Type of study (for extra-mural courses)	-
Programme	Environmental Engineering
Speciality	Environmental Engineering
Responsible department	Department of Biology
Responsible person	Bożenna Słomczyńska, Ph.D. Ewa Karwowska D.Sc, Ph.D.

Semester	Lectures(E)	Tutorials	Laboratory	Computer Exercises	Projects	ECTS
3			30			3

Objectives (summary)

An explanation and education of the microbial role in biological processes in the environment and the principles regulating the relations between biotic and abiotic environmental factors. An approach to understanding the processes determining contaminants neutralisation and recultivation of degraded areas. An evaluation of biological threats in the internal and external environment.

Prerequisites

Biology and ecology - lecture

Rules of integrated grade setting

Grade of the laboratory

Recommended readings

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Contents of laboratory

	Topics	Time (hrs.)	Scope (S / Ex)
1	Optical equipment. Morphology of chosen groups of plants and animals. Investigations of aquatic communities. Saprobic systems. Biodiversity and its estimation. Liebig's and Shelford's law. An influence of antropogenic factors on population changes	12	S
2	Methodology of microbiological research. Techniques of cultivation of microorganisms.	2	S
3	Morphology of bacteria and fungi	4	S
4	Microbiological analysis of water and air	8	S
5	Test No I and No II	4	S
Total		30	hours

S – topics listed in the legal study programme standards from 12.07.2007

Ex – extended topics

Persons responsible for laboratory

Bożenna Słomczyńska , Ph.D.
Ewa Karwowska , D.Sc., Ph.D.

Assessment method for laboratory

Test No 1 and No 2