

1.	<b>Field of study</b>	<b>Environmental Protection</b>
2.	Faculty	Faculty of Natural Sciences
3.	Academic year of entry	2023/2024 (winter term), 2024/2025 (winter term)
4.	Level of qualifications/degree	first-cycle studies
5.	Degree profile	general academic
6.	Mode of study	full-time

<b>7. General information about the module</b>	
<b>Module name</b>	<b>Information technology in natural science</b>
Module code	1OS_23_39
Number of the ECTS credits	3
Language of instruction	
Purpose and description of the content of education	The module aims to familiarize the student with the basic knowledge of information technology. The student gets acquainted with the operating system's operation principles and the method of storing and processing data in the computer's memory. The student acquires the skills of preparing presentations using computer software and remote work. The student gets acquainted with the selected graphic software used in biological/environmental sciences.
List of modules that must be completed before starting this module (if necessary)	not applicable

<b>8. Learning outcomes of the module</b>			
Code	Description	Learning outcomes of the programme	Level of competenc (scale 1-5)
1	Defines and describes the basic concepts of information technology and copyright	1OS_K02 1OS_K05 1OS_U02 1OS_U03 1OS_W07 1OS_W14	2 1 1 2 2 3
2	Uses appropriate software to edit a text document in accordance with the principles of universal design.	1OS_K02 1OS_W07	3 3
3	Creates multimedia presentations on a selected topic in the field of biological sciences in accordance with the principles of universal design	1OS_K02 1OS_W07	3 2
4	Uses a spreadsheet to analyze natural issues	1OS_K02 1OS_U02 1OS_W07	3 1 3

5	Designs and creates databases using appropriate software.	1OS_K02 1OS_U02 1OS_W07	2 1 3
6	A student uses software to process data obtained from experiments and observations.	1OS_K02 1OS_U02 1OS_W07	2 2 4

9. Methods of conducting classes		
Code	Category	Name (description)
b02	Problem-solving methods	Lecture-discussion <i>transmission of content involving interaction with the lecture audience; discussion of lecture-related issues is one of its elements or constitutes its follow-up</i>
d01	Programmed learning methods	Working with a computer <i>e.g., Webquest; implementation of educational tasks using electronic and digital devices, computer programs and Internet applications; the academic teacher acts as a consultant; students' work is carried out step by step according to the plan laid own by the person teaching the course and following his instructions, and proceeds towards producing the indicated results within the set deadline</i>
e01	Practical methods	Laboratory exercise / experiment <i>[also conducted as fieldwork] a method of practical application of knowledge; implemented in three stages: the recognition of a problem induced by the task content, the formulation of the problem and the attempt to solve it accompanied by the assessment of the effects; the goal is to acquire skills, abilities and habits, and to consolidate the acquired knowledge so that it becomes operational; the laboratory method assumes greater independence of learners than carrying out an experiment</i>

10. Forms of teaching					
Code	Name	Number of hours	Assessment of the learning outcomes of the module	Learning outcomes of the module	Methods of conducting classes
1	laboratory classes	30	course work	1, 2, 3, 4, 5, 6	b02, d01, e01

11. The student's work, apart from participation in classes, includes in particular:			
Code	Category	Name (description)	Is it part of the BUNA?
a02	Preparation for classes	Literature reading / analysis of source materials <i>reading the literature indicated in the syllabus; reviewing, organizing, analyzing and selecting source materials to be used in class</i>	Yes
a03	Preparation for classes	Developing practical skills <i>activities involving the repetition, refinement and consolidation of practical skills, including those developed during previous classes or new skills necessary for the implementation of subsequent elements of the curriculum (as preparation for class participation)</i>	Yes

Information on the details of the module implementation in a given academic year can be found in the syllabus available in the USOS system: <https://usosweb.us.edu.pl>.