

1.	Field of study	Biology
2.	Faculty	Faculty of Natural Sciences
3.	Academic year of entry	2025/2026 (winter term)
4.	Level of qualifications/degree	first-cycle studies
5.	Degree profile	general academic
6.	Mode of study	full-time

7. General information about the	General information about the module		
Module name	Information technology in natural science		
Module code	1BL_23_86		
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		

8. Learning	outcomes of the module		
Code	Description	Learning outcomes of the programme	Level of competent (scale 1-5)
1	Defines and describes the basic concepts of information technology and copyright	1BL_K03	2
		1BL_U02	2
		1BL_U09	1
		1BL_U11	2
		1BL_U13	2
		1BL_W09	2
		1BL_W11	3
2	Uses appropriate software to edit a text document in accordance with the principles of universal design.	1BL_U02	2
		1BL_U09	2
		1BL_W09	2
3	Creates multimedia presentations on a selected topic in the field of biological sciences in accordance with the principles of universal design	1BL_U02	2
		1BL_U09	4
		1BL_U11	3

		1BL_W09	2
4	Uses a spreadsheet to analyze natural issues	1BL_U02	3
		1BL_U09	3
		1BL_U11	2
		1BL_W09	3
5	Designs and creates databases using appropriate software	1BL_U02	4
		1BL_U09	2
		1BL_U11	2
		1BL_W09	2
6	The student uses software to process data obtained from experiments and observations.	1BL_U02	4
		1BL_U11	2
		1BL_W09	4

9. Methods of co	Methods of conducting classes		
Code	Category	Name (description)	
b02	Problem-solving methods	Lecture-discussion transmission of content involving interaction with the lecture audience; discussion of lecture-related issues is one of its elements or constitutes its follow-up	
d01	Programmed learning methods	Working with a computer 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	
e01	Practical methods	Laboratory exercise / experiment [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	

LO. Forms of teach	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
	laboratory classes	30	course work	1, 2, 3, 4, 5, 6	b02, d01, e01

11. The student'	. 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 reading the literature indicated in the syllabus; reviewing, organizing, analyzing and selecting source materials to be used in class	Yes	
a03	Preparation for classes	Developing practical skills	Yes	



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)	

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.