1.	Field of study	Biophysics
2.	Faculty	Faculty of Science and Technology
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

7.	General information about the module	
Module name		Data Analysis
Module code		W4-BF-S1-3-23-51B
Number of the ECTS credits		3
Language of instruction		Polish
Purpose and description of the content of education		The course "Data Analysis" has the objective of familiarizing students with the field of data analysis and enhancing their skills in data processing, interpretation, and visualization. Throughout this course, students will be exposed to a variety of data analysis techniques using practical, computer-based methods. They will acquire hands-on experience in utilizing tools and software commonly employed in data analysis, including spreadsheets and programming languages.
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 competenc (scale 1-5)
E1		The student is familiar with computer techniques used in data analysis.	W08	1
E2		The student is able to utilize computer tools for data analysis.	U06	1

9.	Methods of conducting classes	
Code	Category	Name (description)
a05	Lecture methods / expository methods	Explanation/clarification *explication involving the derivation of a predetermined theorem from other, already known ones, in the number of steps specified by the person teaching the course*
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*

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**
FZ1	laboratory classes	30	course work	E1, E2	a05, 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 *reading the literature indicated in the syllabus; reviewing, organizing, analyzing and selecting source materials to be used in class*		No
a03	Preparation for classes	Developing practical skills *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)*		Yes
c03	Preparation for verification of learning outcomes	Implementation of an individual or group assignment necessary for course/phase/ examination completion *a set of activities aimed at performing an assigned task, to be executed out of class, as an obligatory phase/element of the verification of the learning outcomes assigned to the course*		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.