1.	**Field of study**	**Aquamatics - Interdisciplinary Management of Water Environments**
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 (in engineering)
5.	Degree profile	general academic
6.	Mode of study	full-time

7.	**General information about the module**
Module name	**Basics of hydrobiology**
Module code	W2-AQ-S1-008
Number of the ECTS credits	4
Language of instruction	Polish
Purpose and description of the content of education	Celem modułu jest zapoznanie studenta z podstawowymi zagadnieniami hydrobiologii. Moduł przedstawia podstawowe właściwości wód oraz cykle pierwiastków biogennych w środowiskach wodnych. Prezentuje biotyczne i abiotyczne części ekosystemów wodnych oraz ich podstawowe interakcje. Zapoznaje głównymi formacjami ekologicznymi oraz ich przystosowaniami do życia w wodzie.
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)
W2-AQ-S1-008 _1	Posiada podstawową wiedzę na temat właściwości wód oraz krążenia podstawowych pierwiastków w ekosystemach wodnych.	AQ1_W02	3
W2-AQ-S1-008 _2	Zna podstawowe czynniki kształtujące biocenozy wodne oraz rozumie ich wpływ na hydrobionty.	AQ1_W02	3
W2-AQ-S1-008 _3	Ma podstawową wiedzę na temat funkcjonowania ekosystemów wodnych i rozumie występujące w nich zależności.	AQ1_W02	3
W2-AQ-S1-008 _4	Rozpoznaje podstawowe organizmy wodne korzystając z kluczy do oznaczania	AQ1_U03	3
W2-AQ-S1-008 _5	Stosuje metody badań hydrobiologicznych.	AQ1_U10	3
W2-AQ-S1-008 _6	Propaguje postawy etyczne w odniesieniu do ekosystemów wodnych.	AQ1_K03	3

9. Methods of conducting classes

Code	Category	Name (description)
a01	Lecture methods / expository methods	Formal lecture/ course-related lecture

		a systematic course of study involving a synthetic presentation of an academic discipline; its implementation assumes a passive reception of the information provided
c06	Demonstration methods	Demonstration-imitation *a presentation of a model way of performing specific activities accompanied by a commentary; it aims at triggering imitation activities in an individual or in a group of participants observing the activities of the person teaching the course until the right habit is formed through regular exercise; the demonstration-imitation method is combined with a physical practice of activities/behaviours*
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*
e06	Practical methods	Observation *also conducted as fieldwork; a method of watching phenomena, objects or people in a systematic/planned way in order to gain knowledge about them; perceptual separation of elements of a model action as an element of learning through imitation; a complex system of cognition based on sensory experiences*

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
2-AQS1-008_fs_1	lecture	10	exam	W2-AQ-S1-008 _1, W2-AQ-S1-008 _2, W2-AQ-S1-008 _3	a01
2-AQS1-008_fs_2	laboratory classes	15	course work	W2-AQ-S1-008 _4, W2-AQ-S1-008 _5, W2-AQ-S1-008 _6	c06, e01, e06

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
c01	Preparation for verification of learning outcomes	Determining the stages of task implementation contributing to the verification of learning outcomes *devising a task implementation strategy embracing the division of content, the range of activities, implementation time and/or the method(s) of obtaining the necessary materials and tools, etc.*	No
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*	No

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.