

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

7.	General information about the module	
Module name	Fish resources, fishing and aquaculture	
Module code	AQ_010	
Number of the ECTS credits	6	
Language of instruction	English	
Purpose and description of the content of education	The subject is designed to form students a systematic approach to fish stocks, the proper application of various fishing technologies, the importance and possibilities of aquaculture. Students will be able to assess the fish resources of water bodies, choose the proper fishing method, equipment and fishing systems, evaluate the habits of the fish caught and the peculiarities of fishing in different conditions, will be able to predict the necessary aquaculture system and elements, the biotechnology of farmed fish. Students will be able to work practically with closed aquaculture systems, use modern fishing tools in various water bodies, conduct sports fishing competitions or organize recreational fishing.	
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)
01	Able to assess fish stocks in a water body.	AQ2_W01 AQ2_W02	3 3
02	Able to describe in detail the importance of fish stocks, the principles of their protection and rational use.	AQ2_W04 AQ2_W06	3 3
03	Able to explain the specifics and problems of various types of fishing.	AQ2_U01 AQ2_U02 AQ2_U04	3 3 4
04	Able to identify the most commonly caught fish, describe the characteristics of their life and behavior.	AQ2_U01 AQ2_U03 AQ2_U04	3 3 4
05	Able to describe fishing methods, conditions of their application and equipment, is able to apply them in practice.	AQ2_U05 AQ2_U07	3 3

06	Able to describe fishing methods, conditions of their application, and equipment, can apply them in practice.	AQ2_U04 AQ2_U06	3 4
07	Able to explain the differences between types of aquaculture and describe the characteristics of varieties and/or species of aquatic animals and plants grown in aquaculture systems.	AQ2_U04 AQ2_U06	3 4
08	Able to describe the devices used for growing aquatic animals and plants in aquaculture systems, their purpose and needs.	AQ2_U06 AQ2_U08	3 3
09	Explains the methods and tools used for breeding and cultivating aquatic animals and plants, their advantages and disadvantages.	AQ2_K01 AQ2_K03	3 3

9. Methods of conducting classes		
Code	Category	Name (description)
a01	Lecture methods / expository methods	Formal lecture/ course-related lecture <i>a systematic course of study involving a synthetic presentation of an academic discipline; its implementation assumes a passive reception of the information provided</i>
c06	Demonstration methods	Demonstration-imitation <i>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</i>
d03	Programmed learning methods	Working with another teaching tool <i>e.g. using websites in any way or according to the rules set by the teacher; or making use of other subject-specific tools</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
01	lecture	30	exam	01, 02, 03, 04, 05	a01
02	laboratory classes	30	course work	06, 07, 08, 09	c06, d03, 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>	No
a03	Preparation for classes	Developing practical skills <i>activities involving the repetition, refinement and consolidation of practical skills, including those</i>	No

		<i>developed during previous classes or new skills necessary for the implementation of subsequent elements of the curriculum (as preparation for class participation)</i>	
c02	Preparation for verification of learning outcomes	Studying the literature used in and the materials produced in class <i>exploring the studied content, inquiring, considering, assimilating, interpreting it, or organizing knowledge obtained from the literature, documentation, instructions, scenarios, etc., used in class as well as from the notes or other materials/artifacts made in class</i>	No
d01	Consulting the results of the verification of learning outcomes	Analysis of the corrective feedback provided by the academic teacher on the results of the verification of learning outcomes <i>reading through the academic teacher's comments, assessments and opinions on the implementation of the task aimed at checking the level of the achieved learning outcomes</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>.