

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 meteorology and climatology
Module code		W2-AQ-S1-016
Number of the ECTS credits		5
Language of instruction		Polish
Purpose and description of the content of education		The module allows a student to learn the basics of meteorology and climatology, acquire the skills of conducting measurements and observations at a meteorological station, using meteorological data (meteorological yearbooks and Internet databases), and interpret a synoptic map. It will make it possible to learn about climate diversity, its variability and its impact on water management.
List of modules that must be completed before starting this module (if necessary)		[W2-AQ-S1-009] Basics of hydrology [W2-AQ-S1-046] Basics of hydrology - field classes

8.	Learning outcomes of the module			
Code	Description	Learning outcomes of the programme	Level of competenc (scale 1-5)	
W2-AQ-S1-016 _1	A student has basic knowledge about the nature of meteorology and climatology, their place in the system of sciences, the most important scientific problems and their relations to other sciences.	AQ1_W01	5	
W2-AQ-S1-016 _2	A student knows the methods and tools used in meteorology and climatology, including the techniques of obtaining meteorological data; is able to independently perform meteorological observations; knows how to use meteorological data for climatological purposes.	AQ1_U03 AQ1_W01 AQ1_W08	3 3 3	
W2-AQ-S1-016 _3	A student understands the basic phenomena and processes occurring in the Earth's atmosphere; can determine the diversity of climate on the globe - knows the basic types of climate.	AQ1_W02	5	
W2-AQ-S1-016 _4	A student can use the basic theoretical knowledge and available sources of meteorological information (Meteorological Yearbooks, monthly summaries, electronic sources - meteorological databases) to analyze climatic processes and phenomena, demonstrating the ability to make correct inferences.	AQ1_U01 AQ1_U03	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>	

a03	Lecture methods / expository methods	Description <i>a description of objects, phenomena, processes or people; it involves specifying the structure and characteristic features of the object, phenomenon, or process being described; it is usually accompanied by a demonstration of the described object or by its models, drawings, tables, charts, etc.; a description may take the form of an explanation, classification, justification or comparison</i>
b07	Problem-solving methods	Activating methods: a case study <i>a comprehensive description of a phenomenon connected with the selected discipline; reflecting the reality, presenting the 'what', 'where' and 'how' of the phenomenon, i.e., all of its key aspects to be discussed in class; used as a reproduction, presentation, discussion or diagnosis of factors that shape the phenomenon or interact with it; an in-depth qualitative analysis and evaluation of a selected phenomenon</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>
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
W2-AQ-S1_016_fs_2	laboratory classes	30	course work	W2-AQ-S1-016_2, W2-AQ-S1-016_4	a03, c06, d01, e01
W2-AQ-S1_016_fs_1	lecture	15	exam	W2-AQ-S1-016_1, W2-AQ-S1-016_3	a01, a03, b07

11. The student's work, apart from participation in classes, includes in particular:			
Code	Category	Name (description)	Is it part of the BUNA?
a01	Preparation for classes	Search for materials and review activities necessary for class participation <i>reviewing literature, documentation, tools and materials as well as the specifics of the syllabus and the range of activities indicated in it as required for full participation in classes</i>	No
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>	No
c02	Preparation for verification of learning outcomes	Studying the literature used in and the materials produced in class	No

		<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>	
c03	Preparation for verification of learning outcomes	Implementation of an individual or group assignment necessary for course/phase/ examination completion <i>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</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>.