University of Gdańsk

Subject card

Subject name and code	Meteorology I (Lecture), PG_00181439						
Field of study	Marine Hydrography						
Date of commencement of studies	October 2025		Academic year of realisation of subject		2026/2027		
Education level	Bachelor's studies		Subject group		Obligatory subject group in the field of study		
Mode of study	full-time studies		Mode of delivery		at the university		
Year of study	2		Language of instruction		Polish		
Semester of study	3		ECTS credits		1.0		
Learning profile	practical		Assessment form		credit		
Conducting unit							
Name and surname of lecturer (lecturers)	Subject supervisor		dr Janusz Filipiak				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	10.0	0.0	0.0	0.0	0.0	10
	E-learning hours included: 0.0						
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan		Participation in consultation hours		Self-study	SUM
	Number of study hours	10		1.0		14.0	25
Subject objectives	Familiarization with basic physical processes in the ocean-atmosphere system for the purpose of analyzing current weather conditions and their evolution.						

Learning outcomes

Course outcome	Subject outcome	Method of verification
[HML3-U14] use the applicable terminology in presenting and discussing problems related to the field of study	The student is able to use the applicable scientific terminology in presenting and discussing issues related to meteorology.	[SU4] test/exam - oral or written
[HML3-W02] selected phenomena and processes occurring in the hydrosphere, atmosphere, lithosphere and biosphere, their interconnections and relations, as well as practical applications of this knowledge in professional activities related to the field of study	The student knows the basics of the functioning of the atmosphere and its interaction with sea surface	[SW4] test/exam - oral or written
[HML3-W13] global environmental problems resulting from the development of civilisation, in particular strong anthropopressure in the coastal regions of seas and oceans	The student is familiar with global issues related to the atmospheric environment resulting from civilizational development, in particular strong anthropogenic pressure in coastal areas of seas and oceans.	[SW4] test/exam - oral or written
[HML3-U08] independently use the professional literature available in traditional and electronic form, make an assessment, critical analysis and synthesis as well as the correct interpretation of the information obtained	The student is able to independently use professional literature in the field of meteorology, available in traditional and electronic form, databases, and the Internet; is able to integrate, evaluate, and correctly interpret the information obtained, and draw conclusions based on it. The student is able to	[SU4] test/exam - oral or written
[HML3-K01] correctly identify and resolve professional dilemmas, especially in the aspects of security and entrusted property	Complete tasks on time during individual and team work .	[SK4] test/exam - oral or written
[HML3-W01] selected facts, phenomena and processes, as well as methods and theories concerning them, explaining the complex relationships between them, constituting basic general knowledge in the field of scientific disciplines forming the theoretical foundations specific to the field of study	The student knows the basic phenomena and processes occurring in the atmosphere and their mutual relationships.	[SW4] test/exam - oral or written

Subject contents

Structure and properties of the atmosphere.

Radiation.

Water in the atmosphere.

Selected topics in atmospheric dynamics and thermodynamics.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
test	51.0%	100.0%

Recommended reading

Basic literature	KOŻUCHOWSKI K. (red.) 2007. Meteorologia i klimatologia. Wydawnictwo Naukowe PWN.
Supplementary literature	Rettalack B.J., 1991, Podstawy meteorologii, IMGW, Warszawa.
eResources addresses	

Example issues/ example questions/ tasks being completed

1. Describe the vertical structure of the atmosphere.

2. Provide a practical interpretation of the laws of radiation.

3. What is geostrophic wind and how is it formed?

Work placement

Not applicable

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