University of Gdańsk

Subject card

Subject name and code	Meteorology I - lecture, PG_00198806						
Field of study	Marine Hydrography						
Date of commencement of studies	October 2026		Academic year of realisation of subject		2027/2028		
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-W01] knows and understands, at an advanced level, 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	knows and understands, at an advanced level, the phenomena and processes occurring in the atmosphere and their interrelationships	[SW4] test/exam - oral or written
[HML3-W02] knows and understands, at an advanced level, 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	knows the basics of how the atmosphere works and how it interacts with the sea surface	[SW4] test/exam - oral or written
[HML3-K01] is ready to correctly identify and resolve professional dilemmas, especially in the aspects of security and entrusted property	is ready to complete tasks on time, whether working individually or as part of a team .	[SK4] test/exam - oral or written
[HML3-W13] knows and understands global environmental problems resulting from the development of civilisation, in particular strong anthropopressure in the coastal regions of seas and oceans	knows and understands, at an advanced level, the global atmospheric environmental issues resulting from the development of civilization, particularly the intense anthropogenic pressure in coastal regions of seas and oceans	[SW4] test/exam - oral or written
[HML3-U14] is able to use the applicable terminology in presenting and discussing problems related to the field of study	is able to use the applicable scientific terminology in presenting and discussing issues related to meteorology	[SU4] test/exam - oral or written
[HML3-U08] is able to 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	is able to independently use professional literature on meteorology, available in both print and electronic formats, as well as databases and the Internet; is able to synthesize, evaluate, and correctly interpret the information obtained, and draw conclusions based on it	[SU4] 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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