University of Gdańsk

Subject card

Subject name and code	Introduction to Meteorology - auditory classes, PG_00206154		
Field of study	Oceanography		
Date of commencement of studies	October 2026	Academic year of realisation of subject	2028/2029
Education level	Bachelor's studies	Subject group	Obligatory subject group in the field of study Optional subject group
Mode of study	full-time studies	Mode of delivery	at the university
Year of study	3	Language of instruction	Polish
Semester of study	6	ECTS credits	1.0
Learning profile	academic	Assessment form	credit
Conducting unit	Climate Research Laboratory -> Department of Physical Oceanography and Climate Research -> Faculty of Oceanography and Geography -> Rector		
Name and surname of lecturer (lecturers)	Subject supervisor	dr Mirosława Malinowska	
	Teachers		

Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	15.0	0.0	0.0	0.0	15
	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	15	1.0	9.0	25

Subject objectives	Familiarize students with the practical analysis of assessing the basic physical processes occurring in the Earth's atmosphere.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[OCEANL3-W04] has an advanced understanding of issues and research problems in oceanography, and recognizes their connection with other scientific disciplines	Knows and understands the importance of basic techniques, research methods and tools used in meteorology	[SW3] text preparation/written work
[OCEANL3-W02] has a broad knowledge and understanding of physical, biological, chemical, and geological processes and phenomena occurring in aquatic environments, with particular emphasis on the marine environment	Knows and understands the terminology used in atmospheric sciences, knows and understands the basic physical processes occurring in the atmosphere	[SW3] text preparation/written work
[OCEANL3-W01] has an advanced knowledge and understanding of the terminology used in oceanography and related exact and natural sciences (in Polish and a selected foreign language)	Knows and understands the terminology used in atmospheric sciences, knows and understands the basic physical processes occurring in the atmosphere	[SW3] text preparation/written work
[OCEANL3-U01] is able to use the current scientific terminology in the field of oceanography in various forms of expression	Is able to use current scientific terminology in presenting and discussing problems in the field of meteorology and is able to use methods of analyzing and presenting data in meteorology	[SU3] text preparation/written work
[OCEANL3-U05] is able to use general-purpose and specialized software, as well as mathematical and statistical methods, in data analysis and the presentation of results	Is able to use current scientific terminology in presenting and discussing problems in the field of meteorology and is able to use methods of analyzing and presenting data in meteorology	[SU3] text preparation/written work
[OCEANL3-K05] is willing to take responsibility for the safety of his/her own and others' work, is aware of the risks and threats resulting from the work performed	Is willing to continuously deepen a knowledge in the field of atmospheric sciences	[SK3] text preparation/written work

Subject contents

B.1. Earth's radiation balance, the role of the atmosphere in this balance, the greenhouse effect.
B.2. Synoptic maps and their types and use in meteorology.
B.3. Dynamic processes on synoptic maps, determination of wind speed on surface and upper-level maps.
B.4. Thermal wind and temperature advection.
B.5. Humidity and vertical stability of the atmosphere. Aerological diagrams.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
obtaining a passing grade determined on the basis of partial grades on the colloquium and written work.	51.0%	100.0%

Recommended reading

Basic literature	Herman, A., 2006, Podstawy meteorologii. Skrypt do ćwiczeń z przedmiotu "Meteorologia morska", Wyd. UG. (in Polish) Malinowska M. (red.), 2010, Przewodnik do ćwiczeń z meteorologii i klimatologii, Wyd. UG, Gdańsk. (in Polish)
Supplementary literature	Trzeciak, S., 2009, Meteorologia morska z oceanografią, PWN, Warszawa. (in Polish)
eResources addresses	

Example issues/ example questions/ tasks being completed

Work placement

Not applicable

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