University of Gdańsk

Subject card

Subject name and code	Meteorology II (Lecture), PG_00181441		
Field of study	Marine Hydrography		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2025/2026
Education level	Bachelor's studies	Subject group	Obligatory subject group in the field of study Subject group related to practical vocational preparation
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 inż. Piotr Bekier	
	Teachers		

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	15.0	0.0	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

As a result of the training, the trainee should acquire:

a) knowledge in the following areas:
- the functioning of the atmosphere and sea and the interaction of both subsystems;
- measurement equipment used in meteorological observations at sea;
- principles of conducting meteorological and hydrological observations.

b) skills in the following areas:
- using measurement equipment;
- using observation scales correctly;
- determining the true wind based on the apparent wind.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[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	[SU2] presentation/project/paper/ report [SU4] 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 marine and 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-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 .	[SK2] presentation/project/paper/ report
[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
[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.	[SU3] text preparation/written work [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 how the atmosphere and the sea work and how they interact	[SW4] test/exam - oral or written

Subject contents

1. Observed and measured weather elements.
2. Air temperature.
3. Air humidity.
4. Cloud types.
5. Precipitation.
6. Fog and mist.
7. Visibility.
8. Atmospheric pressure.
9. Pressure systems, atmospheric fronts.
10. Ice phenomena.
11. Local winds.
12. Receiving and interpreting weather information on board.
13. Principles of meteorological measurements and observations.
14. Completing the ship's logbook and hydrometeorological observation log.

Prerequisites and co-requisites

This subject is required by the Regulation of the Minister of Infrastructure and Development of 5 February 2014 on framework training programs and examination requirements for deck department seafarers (consolidated text: Journal of Laws of 2023, item 1566): attendance at all classes is mandatory. The Polish Naval Academy allows students to make up up to 20% of their excused absence from these classes in a way that allows them to acquire the missing knowledge and skills. Students who have passed the course but, due to absences exceeding 20% of the classes or who did not make up the classes in a way that allows them to acquire the missing knowledge and skills, will not receive an entry in the supplement confirming completion of studies recognized at the operational level in coastal navigation.

<table>
<tr><td>Assessment methods and criteria</td><td colspan="2"><table>
<tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr>
<tr><td>report</td><td>51.0%</td><td>50.0%</td></tr>
<tr><td>written test</td><td>51.0%</td><td>50.0%</td></tr>
</table></td></tr>
<tr><td rowspan="3">Recommended reading</td><td>Basic literature</td><td>1. DUXBURY A.: Oceany świata. 2002.
2. HERMAN A.: Podstawy meteorologii. Skrypt do ćwiczeń z przedmiotu "Meteorologia morska". Wydawnictwo Uniwersytetu Gdańskiego, 2006.
3. HOLEC M., TYMAŃSKI P.: Podstawy meteorologii i nawigacji meteorologicznej. 1973.
4. KOŻUCHOWSKI K. (red.): Meteorologia i klimatologia. Wydawnictwo Naukowe PWN, 2007.
5. TRZECIAK S.: Meteorologia morska z oceanografią. PWN, 2006.
6. WIŚNIEWSKI B.: Problemy wyboru drogi morskiej. 1992.</td></tr>
<tr><td>Supplementary literature</td><td>1. REYNOLDS R.: Guide to weather. 2004.</td></tr>
<tr><td>eResources addresses</td><td></td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td colspan="2">1. Describe/discuss the vertical structure of the atmosphere.
2. Provide a practical interpretation of the laws of radiation.
3. How to read a synoptic map?</td></tr>
<tr><td>Work placement</td><td colspan="2">Not applicable</td></tr>
</table>

Document generated electronically. Does not require a seal or signature.