

**Subject card**

<b>Subject name and code</b>	Navigation II - laboratory classes , PG_00198808						
<b>Field of study</b>	Marine Hydrography						
<b>Date of commencement of studies</b>	October 2026	<b>Academic year of realisation of subject</b>			2027/2028		
<b>Education level</b>	Bachelor's studies	<b>Subject group</b>			Obligatory subject group in the field of study Subject group related to practical vocational preparation		
<b>Mode of study</b>	full-time studies	<b>Mode of delivery</b>			at the university		
<b>Year of study</b>	2	<b>Language of instruction</b>			Polish		
<b>Semester of study</b>	3	<b>ECTS credits</b>			1.0		
<b>Learning profile</b>	practical	<b>Assessment form</b>			credit		
<b>Conducting unit</b>	Faculty of Oceanography and Geography -> Rector						
<b>Name and surname of lecturer (lecturers)</b>	<b>Subject supervisor</b>		dr inż. Arkadiusz Narloch				
	<b>Teachers</b>						
<b>Lesson types</b>	<b>Lesson type</b>	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	<b>Number of study hours</b>	0.0	0.0	15.0	0.0	0.0	15
	E-learning hours included: 0.0						
<b>Learning activity and number of study hours</b>	<b>Learning activity</b>	<b>Participation in didactic classes included in study plan</b>		<b>Participation in consultation hours</b>		<b>Self-study</b>	<b>SUM</b>
	<b>Number of study hours</b>	15		1.0		9.0	25
<b>Subject objectives</b>	<p>Mastering skills in the following areas:</p> <p>navigation (based on the framework training program at the operational level in the deck department in coastal shipping), selected elements of nautical science, and issues related to sea levels and tides for class B hydrographers (based on the framework training program for class B marine hydrographers).</p>						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[HML3-U14] is able to use the applicable terminology in presenting and discussing problems related to the field of study	is able to: - define and verify potential navigational hazards - use nautical publications - determine the position of a vessel using terrestrial and electronic methods - navigate safely - determine and calculate compass corrections - plan a vessel's voyage - perform navigational calculations regarding the course and route of a vessel - perform navigational calculations regarding the course and route of a vessel - perform navigational calculations regarding the course and route of the ship	[SU4] test/exam - oral or written
	[HML3-U11] is able to use navigation devices, means of technical observation and communication as well as measuring instruments, as well as apply in practice various techniques of measurement and observation in the field of professional activity related to the field of study	is able to: - effectively plan a ship's voyage - navigate safely in coastal waters	[SU4] test/exam - oral or written
Subject contents	<p>1. BASICS OF NAVIGATION</p> <p>1. Basics of trip planning, taking into account tides and ice navigation.</p> <p>2. GEODETIC AND CARTOGRAPHIC BASICS OF NAVIGATION</p> <p>1. Electronic maps.</p> <p>3. LOXODROMIC NAVIGATION</p> <p>1. Problems of loxodromic navigation.</p> <p>2. The course of a loxodrome on a Mercator map.</p> <p>4. DETERMINING THE POSITION OF A SHIP</p> <p>1. Technique of performing navigational measurements.</p> <p>2. Plotting the observed position of a ship from one or more objects.</p>		
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 excused absences from these classes in a form that allows them to acquire missing knowledge and skills. Students who have passed the course but, due to absences exceeding 20% of classes or who did not make up the classes in a form that allows them to acquire missing knowledge and skills, will not receive an entry in the supplement confirming completion of studies recognized at the operational level in coastal navigation.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	test	51.0%	100.0%
Recommended reading	Basic literature	<p>1. URBAŃSKI J., KOPACZ Z., POSIŁA J.: Nawigacja morska. Część I i II. Wydawnictwo AMW, Gdynia 2000.</p> <p>2. WOLSKI A.: Pozycja zliczona i obserwowana w nawigacji morskiej. Inżynieria, Szczecin 2016.</p> <p>3. ŻOŁNIERUK D.: Nakres drogi okrętu. Część I. Wydawnictwo AMW, Gdynia 2016</p>	

	Supplementary literature	1. DĄBROWSKI T., CZAPLEWSKI K.: Locja morska. Wydawnictwo AMW, Gdynia 1998 2. WRÓBEL F.: Vademecum oficera wachtowego, TradeMar, Gdynia 2006
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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