

关。GDAŃSK UNIVERSITY 创 OF TECHNOLOGY

Subject card

Subject name and code	Ship Theory 2, PG_00053547									
Field of study	Ocean Engineering, Ocean Engineering									
Date of commencement of studies	October 2020		Academic year of realisation of subject			2021/2022				
Education level	first-cycle studies		Subject group							
Mode of study	Full-time studies		Mode of delivery			at the university				
Year of study	2		Language of instruction			Polish				
Semester of study	4		ECTS credits			3.0				
Learning profile	general academic profile		Assessment form			assessment				
Conducting unit	Zakład Hydromechaniki i Hydroakustyki Okrętu -> Institute of Ocean Engineering and Ship Technology -> Faculty of Mechanical Engineering and Ship Technology						nnology ->			
Name and surname	Subject supervisor	dr hab. inż. Przemysław Krata								
of lecturer (lecturers)	Teachers		dr inż. Ewelina Ciba							
			dr hab. inż. Przemysław Krata							
Lesson types and methods	Lesson type	Lecture	Tutorial	Laboratory	Projec	t	Seminar	SUM		
of instruction	Number of study hours	15.0	15.0	15.0	0.0		0.0	45		
	E-learning hours included: 0.0			I		I				
	Adresy na platformie eNauczanie: Teoria Okrętu II - hydrostatyka, stateczność - Moodle ID: 22589 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=22589									
Learning activity and number of study hours	Learning activity Participation in classes include plan		I didactic Participation in ed in study consultation hours		Self-study SUM					
	Number of study hours	45		0.0		0.0		45		
Subject objectives	The course aims at outlining the generic background of the hydrostatic calculations typically applicable to ships, yachts and other floating structures. The introduction to ship stability issues is presented in order to provide the very basics for further stability calculations routinely undertaken during a ship design process.									
Learning outcomes	arning outcomes Course outcome				Subject outcome			Method of verification		
	[K6_U05] can formulate a simple engineering task and its specification within the range of design, construction and operation of ocean technology objects and systems		A student is able to identify engineering issues related to buoyancy and stability of ships, and to search for relevant solutions.			[SU1] Assessment of task fulfilment				
	[K6_W03] has a basic knowledge on hydromechanics, thermodynamics, machine construction, ecology, materials science and electronics necessary to understand the construction and operation principles of ocean technology objects and equipment		A student is familiar with common practice of presentation and preparation of hydrostatic data, stability booklet.			[SW1] Assessment of factual knowledge				
	[K6_W05] has an organized knowledge on design, construction and operation of ocean technology objects and systems		A student reveals well structured knowledge with respect to hydrostatics and stability of ships.			[SW1] Assessment of factual knowledge [SW3] Assessment of knowledge contained in written work and projects				
Subject contents	 Basics of the hydrostatic curves determination. Initial stability. Salculation of draft at perpendiculars. Stability for large angle of heel. Righting arm curve and its interpretation. Determination of a static angle of heel. Basics of the dynamical stability of ships. 									
Prerequisites and co-requisites	Background of physics at the secondary school level.									

Assessment methods	Subject passing criteria	Passing threshold	Percentage of the final grade			
and criteria	Final test	50.0%	100.0%			
Recommended reading	Basic literature	Rawson K.J., Tupper E. C., Basic Ship Theory.				
		International Code on Intact Stability, 2008, (2008 IS				
	Supplementary literature	Lewis, E. V. (ed): Principles of Naval Architecture.				
		Hirdaris, S., Lecture Notes on Basic Naval Architecture, Aalto University, 2021.				
	eResources addresses	Teoria Okrętu II - hydrostatyka, stateczność - Moodle ID: 22589 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=22589				
Example issues/ example questions/ tasks being completed	W opisanym stanie załadowania statku określ jego wyporność, współrzędne środka masy oraz statyczny i dynamiczny kąt przechyłu powstały w wyniku działania momentu przechylajacego wywołanego przesunięciem masy na statku.					
	Wyznacz wyporność statku na podstawie odczytanych zanurzeń na znakach.					
Work placement	Not applicable					