



Subject card

Subject name and code	Ship Structures 2, PG_00046526						
Field of study	Ocean Engineering, Ocean Engineering						
Date of commencement of studies	October 2020	Academic year of realisation of subject			2022/2023		
Education level	first-cycle studies	Subject group					
Mode of study	Part-time studies	Mode of delivery			at the university		
Year of study	3	Language of instruction			Polish		
Semester of study	5	ECTS credits			3.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Institute of Ocean Engineering and Ship Technology -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Krzysztof Wołoszyk					
	Teachers	dr inż. Krzysztof Wołoszyk mgr inż. Paweł Bielski					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	20.0	10.0	0.0	0.0	0.0	30
	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	30	6.0		44.0		80
Subject objectives	Familiarize students with the problems of the construction of hulls of sea vessels and ocean engineering facilities.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K6_W05] has an organized knowledge on design, construction and operation of ocean technology objects and systems				[SW1] Assessment of factual knowledge		
	[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				[SU3] Assessment of ability to use knowledge gained from the subject		
Subject contents	Materials for ship hull. Structure of particular ship hull areas. Bottom structure. Double and single bottom. Decks. Deck functions. Decks without hatches. Vertical and horizontal loading system. Ship's sides. Single and double side structure. Bulkheads and compartments. Bulk-head types. Flat and corrugated bulkheads. Classification societies requirements. Structure of the fore and aft part of the ship. Foundations for the main engine, auxiliary engines, machinery, ship equipment and boilers. Tank structure. Superstructures and deckhouses. Anti-icing reinforcements.						
Prerequisites and co-requisites							
Assessment methods and criteria	Subject passing criteria	Passing threshold			Percentage of the final grade		
	test	60.0%			100.0%		

Recommended reading	Basic literature	<ul style="list-style-type: none"> - S.P.Timoshenko, J.M.Gere, Teoria stateczności sprężystej, Wyd. Arkady, 1961. - W.Więckiewicz, Budowa kadłubów statków morskich, Dział wyd. WSM w Gdyni, 1999. - J. Więckowski, Mechanika konstrukcji okrętowych, skrypt Politechniki Gdańskiej, 1985. - Polski Rejestr Statków, Przepisy klasyfikacji i budowy statków morskich, Cz. II Kadłub. - Polski Rejestr Statków, Publikacja Nr 45/P, Analiza wytrzymałości zmęczeniowej stalowego kadłuba statku, Gdańsk, 1998. - Polski Rejestr Statków, Przepisy klasyfikacji i budowy statków śródłądowych, Cz.II Kadłub. - Polski Rejestr Statków, Przepisy klasyfikacji i budowy doków pływających, Cz.II Kadłub i wyposażenie kadłubowe. - D.J Eyers, Ship Construction. Elsevier, Toronto 2001
	Supplementary literature	Regulations of Classification Societies
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed	<p>1. Division of grates in ship structure 2. The division and role of brackets in the ship's hull structure 3. Description of the hull structure based on the drawing 4. Definition of FEM terms: shell, plate, shield 5. Calculations, e.g. of the double bottom height (PRS)</p>	
Work placement	Not applicable	