GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Ship Structure 2, PG_00045051		
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	Department of Theory and Ship Design -> Faculty of Mechanical Engineering and Ship Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. inż. Tomasz Mikulski	
	Teachers	dr inż. Marian Bogdaniuk	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	30.0	15.0	0.0	0.0	0.0	45

E-learning hours included: 0.0

Adresy na platformie eNauczanie:

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	45	5.0	25.0	75

Subject objectives

To give students basic information related to design os fast crafts hulls, design of off-shore objects, design of ship cranes foundations,hatch covers, hulls of yachts and requirements of IACS Common structural Rules for Bulk carriers and Oil Tankers.

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	The student is able to apply the known methods of structure analysis and verify correctness of the solution.	[SW1] Assessment of factual knowledge [SW3] Assessment of knowledge contained in written work and projects
[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	The student is able to define the structural system of a given object and indicate the main and secondary load-bearing elements of the structure.	[SU2] Assessment of ability to analyse information [SU3] Assessment of ability to use knowledge gained from the subject

Subject contents	Floating docks. Hulls of fast vessels. Self-elevating and semi-submersible platforms. Foundations of ship cranes. Hatch covers. Stern and bow doors of Ro-Ro ships. Hulls of yachts. Common Structural IACS Rules for bulk carriers and tankers.	
Prerequisites and co-requisites	Student should have basic knowledge on theory of ships, technical mechanics, design materials, technical drawings and lectures on ship structures from semesters III and IV.	
Assessment methods and criteria	Subject passing criteria: test (in written form)	Passing threshold: 60.0% / Percentage of the final grade: 100.0%
Recommended reading	Basic literature	As above (in Polish) and:. 1. Polski Rejestr Statków, Rules for Classification and *Construction of Sea-going Ships,,Part.II Hull,* Gdańsk, 2011. 2. Polski Rejestr Statków, Rules for Classification and *Construction of Sea-going Ships,,Part.III Hull Equipment,* Gdańsk, 2007. 3. Polski Rejestr Statków, Rules for Classification and *Construction of Yachts.* 4. Det Norske Veritas, *Rulet for Classification of Mobile Offshore Units.* 5. IACS, Common Structural Rules for Bulk Carriers, 2006. 6. IACS, Common Structural Rules for Bulk Tankers, 2006.
	Supplementary literature	1. Det Norske Veritas, *Rulet for Classification of Mobile Offshore Units.* S.Wewiórski, *Wyposażenie kadłuba okrętowego*, Wydawnictwo Morskie, Gdańsk, 1971. 2. S.Wewiórski, *Wyposażenie kadłuba okrętowego*, Wydawnictwo Morskie, Gdańsk, 1971. 3. IACS, Common Structural Rules for Bulk Carriers and Oil Tankers, 2014.
	eResources addresses	

Example issues/ example questions/ tasks being completed	Present a typical structure: - hull of a fast craft; - foundation of a ship crane; - hatch cover; - steel hull of a yacht; - hull and legs of a self-elevating unit.
Work placement	Not applicable