

关。GDAŃSK UNIVERSITY 创 OF TECHNOLOGY

Subject card

Subject name and code	Cargo Science, PG_00056205								
Field of study	Transport and Logistics								
Date of commencement of studies	October 2022		Academic year of realisation of subject			2023/2024			
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			2.0			
Learning profile	general academic profile		Assessment form			assessment			
Conducting unit	Zakład Wyposażenia Okrętu -> Institute of Ocean Engineering and Ship Technology -> Faculty of Mechanical Engineering and Ship Technology								
Name and surname	Subject supervisor	dr inż. Agnieszka Maczyszyn							
of lecturer (lecturers)	Teachers	dr inż. Agnies	r inż. Agnieszka Maczyszyn						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Projec	t	Seminar	SUM	
	Number of study hours	30.0	0.0	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	30 2		2.0			50	
Subject objectives	Knowledge of the classification of types of goods, the quality characteristics of goods, the criteria for the division and classification of cargo, knowing the resistance of cargo for transport and storage, understanding the rules of transport of dangerous goods and their classification.								
Learning 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 means and systems of transport		Knowledge of cargo resistance during transport and storage, including hazardous cargos			[SU2] Assessment of ability to analyse information			
	[K6_W05] has an organized knowledge on design, construction and operation of means and systems of transport		Knowledge of cargo classification, cargo quality, criteria of cargo classification			[SW3] Assessment of knowledge contained in written work and projects			
	[K6_W08] has knowledge regarding the principles of sustainable development		take active part in discussions			[SW1] Assessment of factual knowledge			
Subject contents	Basic definitions: transport, transportatin process, commodities, science of commodities, cargo, science of cargo, quality, standaryzation, unification; cargo vunerability; Cargo classification; Physical and chemical properties of cargo; Biochemical properties of cargo; external impact on cargo; packaging; cargo units; cargo containers; classification of containers; Packaging marking; main loading technique: Lo - Lo, Ro - Ro, Pump in - Pump out; Cranes: types, characteristics, capacities; traveling cranes; lift trucks; store equipment: lift, wagon tipplers; cargo holders; loading techniques and cargo protection on the transport vehicles.								
Prerequisites and co-requisites	Principles od machine design								
Assessment methods	Subject passing criteria		Passing threshold			Percentage of the final grade			
and criteria	Colloquia		55.0%			100.0%	0		

Recommended reading	Basic literature	Szarnow R.: Ładunkoznawstwo okrętowe, Wyd. WSM Gdynia 1996 Nierzwicki W.: Opakowania, Wyd. WSM Gdynia 1996		
		Korzeniowski A.: Zarządzanie gospodarką magazynową, PWE 1997		
		Grzybowisk L.: Kontenery w transporcie morskim, Wyd. Trademar Gdynia 1999		
		Gubiła M.: Podstawy zarządzania magazynem w przykładach, Biblioteka logistyka Poznań 2002 Wiśnicki B.: Vademecum konteneryzacji, Link 2006		
	Supplementary literature	Karpiel Ł., Skrzypek M.: Towaroznawstwo ogólne, Wyd. Akademii Ekonomicznej 2000		
	eResources addresses	Adresy na platformie eNauczanie:		
		Ładunkoznawstwo, W, TiL, sem.4,letni 23/24 (PG_00056205) - Moodle ID: 36772 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=36772		
Example issues/ example questions/ tasks being completed				
Work placement	Not applicable			