Subject card

Subject name and code	Cargo Determination, PG_00045239		
Field of study	Transport and Logistics, Transport and Logistics		
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	Full-time studies	Mode of delivery	at the university
Year of study	3	Language of instruction	Polish
Semester of study	5	ECTS credits	4.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Faculty of Ocean Engineering and Ship Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Agnieszka Maczyszyn	
	Teachers	dr inż. Agnieszka Maczyszyn	

Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	0.0	15.0	0.0	45
	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	45	5.0	42.0	92

Subject objectives	Knowledge of cargo classification, cargo quality characteristics, criteria of subdivision and classification of cargo, cargo resistance to transport and storage conditions, principles of hazardous cargo transport and classification. P/S Justification of selection of a project theme, determination of the work objective and the necessary elements to active the intendant effect. Presentation of the elements of performed project, active participation in seminar discussions

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	The student has the ability justification for the choice of topic of the project, defining the purpose of the work and elements necessary for achieving the intended goal in the field of cargo science and Transport.	[SU1] Assessment of task fulfilment [SU2] Assessment of ability to analyse information [SU4] Assessment of ability to use methods and tools
	[K6_W05] has an organized knowledge on design, construction and operation of means and systems of transport	Ability to correctly select the means and commodity system due to the type of cargo	[SW2] Assessment of knowledge contained in presentation [SW3] Assessment of knowledge contained in written work and projects

Subject contents	LECTURES Basic definitions: transport, transportation process, commodities, science of commodities, cargo, science of cargos, quality, standardization, unification; cargo vulnerability; cargo classification; physical and chemical properties of cargo; biochemical properties of cargo; external impact on cargos; packaging; cargo units; cargo containers; classification of containers; packaging markings, main loading techniques; choice of loading technique: Lo-Lo, Ro-Ro, Pump in - Pump out; cranes: types, characteristics, capacities; travelling cranes, cranes, lift trucks; store equipment: lift, wagon tipplers; cargo holders; loading techniques and cargo protection on the transport vehicles. SEMINAR A mini-project in selected problems

Prerequisites and co-requisites	Principles of machine design		

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	passing the project in writing and orally	50.0%	50.0%
	Midterm colloquium	50.0%	50.0%

Recommended reading	Basic literature	1. Szarnow R.: Ładunkoznawstwo okrętowe, Wyd. WSM Gdynia 1996 2. Nierzwicki W.: Opakowania, Wyd. WSM Gdynia 1996 3. Korzeniowski A.: Zarządzanie gospodarką magazynową, PWE 1997 4.Grzybowisk L.: Kontenery w transporcie morskim, Wyd. Trademar Gdynia 1999 5.Karpiel Ł., Skrzypek M.: Towaroznawstwo ogólne, Wyd. Akademii Ekonomicznej 2000 6.Gubiła M.: Podstawy zarządzania magazynem w przykładach, Biblioteka logistyka Poznań 2002 7.Wiśnicki B.: Vademecum konteneryzacji, Link 2006
	Supplementary literature	No requirements
	eResources addresses	Adresy na platformie eNauczanie: Ładunkoznawstwo, WiP, TiL, sem.04,zimowy 22/23 (PG_00045239) - Moodle ID: 25823 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=25823
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	