GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	FUNDAMENTALS OF WATER TRANSPORT SYSTEMS, PG_00044609		
Field of study	Transport		
Date of commencement of studies	October 2022	Academic year of realisation of subject	2023/2024
Education level	first-cycle studies	Subject group	Obligatory subject group in the field of study
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	4.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of Geotechnics, Geology and Marine Civil Engineering -> Faculty of Civil and Environmental Engineering		
Name and surname of lecturer (lecturers)	Subject supervisor	mgr inż. Patrycja Jerzyło	
	Teachers		

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	30.0	15.0	0.0	15.0	0.0	60

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	60	5.0	35.0	100

Subject objectives

The student is getting acquainted with the basic informations about inland and maritime navigation, hydrotechnical constructions, susatinable transport, safety of the navigation, revitalization of waterways.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_W08] understands the theoretical basis of transport processes and systems which is useful for understanding the general transport structures and transport chains	The student has a knowledge in the scope of processes and transport systems useful for understanding general structures and transport chains	[SW1] Assessment of factual knowledge
[K6_W12] has basic knowledge of the design and construction of transport infrastructure	The student has a basic knowledge in the scope into designs and construction of the infrastructure of the water transport	[SW3] Assessment of knowledge contained in written work and projects
[K6_U04] able to use transport terms properly and speak about a problem using modern audiovisual techniques	The student has a basic knowledge in the traffic engineering in the transport water for grasping meaning for her for functioning of the transport and diversifying applications in different branches of the transport	[SU1] Assessment of task fulfilment
[K6_W09] has basic knowledge of transport traffic engineering to understand its importance for transport operation and differentiate between how it is applied in different modes of transport	The student is able appropriately to determine priorities serving the performance of a task transport in the water transport	[SW3] Assessment of knowledge contained in written work and projects

Subject contents

Provisions, resolutions, the circulars, concerning the water transport, entities responsible for water administration (IMO), organizational structure of the water management in Poland, hydrotechnical constructions of rivers and lakes, characteristics and classification of the infrastructure of the water transport, buoyage systems, vessel trafic system, safety of the navigation, intermodal transport, maintaining the watreways and the revitalization of the inland waterways, influence of the water transport on the environment

Prerequisites and co-requisites

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Project	60.0%	30.0%
	Presentation	60.0%	30.0%
	Lecture test	60.0%	40.0%
Recommended reading	Basic literature	[1] Chuchla Z. Zarządzanie morskim statkiem transportowym oraz jego eksploatacja , Gdynia 2005,[2] Dz.U. 1991 nr 32 poz. 131 Ustawa z dnia 21 marca 1991 r. o obszarach morskich Rzeczypospolitej Polskiej i administracji morskiej,[3] Dz.U. 2001 nr 5 poz. 43 Ustawa z dnia 21 grudnia 2000 r, o żegludze śródlądowej,[4] Girtler J. I inni, Wybrane zagadnienia eksploatacji statków morskich w aspekcie bezpieczeństwa żeglugi Szczecin 2003,[5] Gucma S. Inżynieria ruchu morskiego, Gdańsk 2001,[6] Gucma S., Jagniszczak I. Nawigacja dla kapitanów, Fundacja Promocji PrzemysłuOkrętowego i Gospodarki Morskiej, 2006[7] Jagniszczak I. Systemy sterowania i zarządzania ruchem statków, Szczecin 2001,[8] Jagniszczak I. Systemy sterowania i zarządzania ruchem statków i barek na wodach przybrzeżnych i śródlądowych, studia nr 41, Szczecin 2003,
	Supplementary literature	[1] Kristiansen S., Maritime Transportation: Safety Management and Risk Analysis. Elsevier,2005.[2] MSC 69/INF.14 Formal Safety Assessment, IMO, Londyn, 12.02.1998r.,[3] Niebieska Księga. Projekty transportu kombinowanego/intermodalnego.[4] Przepisy Portowe,
	eResources addresses	Adresy na platformie eNauczanie: Podstawy Systemów Transportu Wodnego 2023/2024 - Moodle ID: 36103 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=36103
Example issues/ example questions/ tasks being completed	What does functioning of a seaport depend on? What aims of the water management are? Replace the elements of the water dam.		
Work placement	Not applicable		