GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Maritime Logistics, PG_00056203		
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	4.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Division of Applied Computer Science -> Institute of Naval Architecture -> Faculty of Mechanical Engineering and Ship Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Marcin Życzkowski	
	Teachers	dr inż. Marcin Życzkowski	

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

Additional information:
The student also follows media reports on Maritime Economy, Orska Logistics and Maritime Transport. Once a semester, each student presents in the form of a presentation the most important events during one week and presents a SWOT analysis.

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	6.0	49.0	100

Subject objectives

Presentation of the basic concepts and definitions of logistics, the area of interest, acquire skills of solving logistic problems.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_U07] applies knowledge on humanities, social and economical science in solving problems	The student acquires skills in the implementation of tasks related to planning a sea route, taking care of supplies and safety during a sea voyage.	[SU1] Assessment of task fulfilment [SU5] Assessment of ability to present the results of task
[K6_W07] has a general knowledge on humanities, social and economical sciences. Knows the rules of creating the forms of personal entrepreneurship and economic activity, has knowledge on the protection of intellectual property rights and industrial property rights and copyrights	The student acquires knowledge of maritime logistics, including the basics of sea route planning, the basics and rules of maritime transport. He has knowledge of E-Maritime and E-Transport support systems.	[SW1] Assessment of factual knowledge [SW2] Assessment of knowledge contained in presentation

Subject contents

The course consists of lectures and exercises. In addition, students carry out an independent project.

As part of this project, students follow media reports on Maritime Economy, Maritime Logistics and Maritime Transport throughout the semester. Every week, students present major SWOT events and changes in performances. probably once a semester, each student presents his/her work,

Class topics:

The first classes are introduced to the subject of logistics, they present the genesis, the area of interaction of logistics, e-environment, and logistics, the basic concept of logistics and tasks in front of the logistics itself.

Then, obligatory classes are with marine traffic engineering (geodesy, geophysics, geomorphology, terrestrial magnetism, sea geography, marine navigation).

The next classes discuss the parameters of the sea route. The impact on safety during a sea voyage is presented, and CO2 emissions are presented.

Classification of sea vessels according to various criteria. In addition, data on sea transport are provided. Shipping costs are shown.

The main parameters of a sea-going vessel are presented, including data on the vessel, stability and displacement.

One of the methods of checking the loading condition of a seagoing vessel (Draft Survey) is presented

Discuss in detail loading and export to a container ship. The main statistical data on this means of transport are presented.

The flow of documents during sea exchange is presented.

Issues related to the introduction in maritime transport were discussed. The organizational structure of the IMO is presented. Conventions related to the maritime traffic environment, safety and environmental protection at sea are presented.

Issues related to seaports were presented, especially issues related to the approach zone to the port, the so-called Vessel Traffic System.

Several optimization algorithms that are used in maritime logistics are discussed. (Knapsack Problem, Prim's Algorithm, Kraskul's Algorithm, Disjktry)

After each lecture, the student completes the e-course test at home.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Project	50.0%	30.0%
Tasks during the exercises	50.0%	40.0%
Test	50.0%	30.0%

Recommended reading

Basic literature	1. M.Jurdzińskie. Podstawy nawigacji morskiej. Gdynia 2003 2. M.Siudak. Badania Operacyjne. OWPW 1997 3. H.Wagner. Badania Operacyjne. PWE 1980 4. Podstawy logistyki. Praca zbiorowa, Biblioteka Logistyka, Instytut Logistyki i Magazynowania w Poznaniu, Poznań 2008. 5. Wilson Robin J. Wprowadzenie do teorii grafów. PWN 2016
Supplementary literature	n/d
eResources addresses	Adresy na platformie eNauczanie: Logistyka Morska sem. letni 2024 - Moodle ID: 36236 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=36236

Example issues/ example questions/ tasks being completed

For storage truck arrived with a capacity of 10 t. Truck has so load the car to the value of the load was greatest, and the weight of the goods does not exceed 10 t. Here is a list of available goods in stock:

Chest gold 6t 11mln zł; gearbox 5 silver, 5; transmission diamonds 4.7; Clothes designers 1 6; Exclusive watches 3.2; Electronic equipment 5.1; Works of art 2 8; China 4 5;

Work placement

Not applicable

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