GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Warehouse Storage Techniques, PG_00060678		
Field of study	Transport and Logistics		
Date of commencement of studies	October 2025	Academic year of realisation of subject	2027/2028
Education level	first-cycle studies	Subject group	Optional subject group Subject group related to scientific research in the field of study
Mode of study	Full-time studies	Mode of delivery	at the university
Year of study	3	Language of instruction	Polish
Semester of study	6	ECTS credits	4.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Zakład Projektowania Okrętu - Brak (istniała Wcześniej) -> Institute Of Naval Architecture -> Faculty Of Mechanical Engineering And Ship Technology -> Wydziały Politechniki Gdańskiej		
Name and surname of lecturer (lecturers)	Subject supervisor	prof. dr hab. inż. Jakub Montewka	
	Teachers		

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	30.0	0.0	0.0	30.0	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	4.0	36.0	100

Subject objectives

The aim of the subject is to familiarize with the basic knowledge of the process of storing goods and services related to them. The subject is designed to present the most important aspects in the field of supply chain management, domestic and international logistics of goods and services, the functioning of the warehouse market in Poland and Europe, the construction and equipment of warehouses, the operation of warehouses in the logistics process. An important element of the subject is a project in which the Student learns to design and equip the warehouse with its most important elements.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_W08] has knowledge of the principles of sustainable development	The student is aware of the need to develop in a sustainable manner, taking into account a number of aspects related to a given system and the environment in which this system operates.	[SW3] Assessment of knowledge contained in written work and projects
[K6_U05] can formulate a simple engineering task and its specification in the field of design, maintenance and operation of transport means and systems	The student is able to prepare a simple project related to the construction or operation of a selected element and aspect of the transport system, being aware of the boundary conditions and limitations.	[SU3] Assessment of ability to use knowledge gained from the subject

<table>
<tr><td>Subject contents</td><td>1. Introduction to the subject
2. The essence and importance of the warehouse and warehousing in a logistics system, supply chain management
3. Logistic infrastructure and the warehouse market in Poland, the flow of information in logistics
4. Types and kinds of warehouses, classification. Modal points in logistics. The functioning of the warehouse,
5. Forms and types of warehouses (logistic, storage and distribution centers)
6. Goods storage techniques. Processes in the warehouse, warehouse division, storage zones, construction and equipment of the warehouse
7. Warehousing techniques. Forming cargo units in warehouses. Stocks and stock management. Cross-docking
8. Warehouse processes. Division of warehouses, storage zones, construction and equipment of the warehouse
9. Warehouse techniques and technical equipment of the warehouse
10. automatic warehouses
11. IT systems in warehousing
12. Security in storage</td></tr>
<tr><td>Prerequisites and co-requisites</td><td></td></tr>
<tr><td>Assessment methods and criteria</td><td>
<table>
<tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr>
<tr><td>Lectures</td><td>51.0%</td><td>50.0%</td></tr>
<tr><td>Project</td><td>51.0%</td><td>50.0%</td></tr>
</table>
</td></tr>
<tr><td>Recommended reading</td><td>
<table>
<tr><td>Basic literature</td><td>1. Paweł Andrzejczyk, Paweł Fajfer, Ewa Rajczakowska, Podstawy logistyki w przykładach i ćwiczeniach, Instytut Logistyki i Magazynowania, 2020
2. Daniel Chudzik Andrzej Szymonik, , Logistyka nowoczesnej gospodarki magazynowej, Difin 2018
3. Cieśla Maria, Hat-Garncarz Grażyna, Opasiak Tadeusz, Nowakowski Piotr , Logistyka w łańcuchach dostaw. Wybrane zagadnienia, Wydawnictwo Politechniki Śląskiej 2017
4. Jan Długosz, Nowoczesne technologie w logistyce, PWE 2017
5. Gołembska Elżbieta, Majchrzak-Lepczyk Justyna, Bentyn Zbigniew , Logistyka usług, PWN 2017
6. Michał Kłodawski, Modelowanie procesów magazynowych w zastosowaniu do oceny wydajności i bezpieczeństwa pracy w magazynach, Oficyna Wydawnicza Politechniki Warszawskiej
7. Michał Kłodawski, Modelowanie procesów magazynowych w zastosowaniu do oceny wydajności i bezpieczeństwa pracy w magazynach, Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa 2019
8. Łapko Aleksandra, Wagner Natalia, Logistyka dystrybucji . Trendy - Wyzwania Przykłady, CeDeWu Sp. z o.o. 2019
9. Richards Gwynne, Zarządzanie logistyką magazynową, Wydawnictwo Naukowe PWN, 2016
10. Grzegorz Tarczyński, Optymalizacja procesów magazynowych, Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu, 2019</td></tr>
<tr><td>Supplementary literature</td><td>1. Cieśla Maria, Hat-Garncarz Grażyna, Opasiak Tadeusz, Nowakowski Piotr , Logistyka w łańcuchach dostaw. Wybrane zagadnienia, Wydawnictwo Politechniki Śląskiej 2017
2. Richards Gwynne, Zarządzanie logistyką magazynową, Wydawnictwo Naukowe PWN, 2016</td></tr>
<tr><td>eResources addresses</td><td>Adresy na platformie eNauczanie:</td></tr>
</table>
</td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td></td></tr>
<tr><td>Work placement</td><td>Not applicable</td></tr>
</table>

Document generated electronically. Does not require a seal or signature.