GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Logistics process management, PG_00059506		
Field of study	Management and Production Engineering		
Date of commencement of studies	February 2023	Academic year of realisation of subject	2023/2024
Education level	second-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	1	Language of instruction	Polish
Semester of study	2	ECTS credits	3.0
Learning profile	general academic profile	Assessment form	exam
Conducting unit	Zakład Technologii Maszyn i Automatyzacji Produkcji -> Institute of Manufacturing and Materials Technology -> Faculty of Mechanical Engineering and Ship Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Aleksandra Wiśniewska	
	Teachers	dr inż. Sławomir Szymański dr inż. Aleksandra Wiśniewska	

Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	15.0	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	8.0	37.0	75

Subject objectives	The student learns the goals and principles of the supply chain operation in terms of logistics. The student learns the methods and tools used in supply chain management. By expanding knowledge and performing simple exercises related to the analyzed areas of issues related to the scope of the supply chain, the student can independently design a supply chain management system, starting from the development of a supply system and an optimized technological line, through the evaluation and selection of suppliers, and ending with efficient distribution.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_K05] is able to integrate the possessed knowledge from various scientific disciplines, and in the innovative implementation of engineering tasks also take into account system and non-technical aspects, including ethical ones	The student organizes his own and team work, choosing the means and methods of managing roles in the team, managing the division of tasks and managing change. Knows and uses activation methods and tools that foster creativity and innovation.	[SK1] Assessment of group work skills [SK3] Assessment of ability to organize work [SK4] Assessment of communication skills, including language correctness [SK5] Assessment of ability to solve problems that arise in practice
	[K7_K01] is aware of the need to expand knowledge and verify the methods of solving problems by consulting experts	The student is able to analyze the effectiveness of their chosen methods of solving problems. Is able to identify shortages of knowledge, skills and experience, and then set development directions based on the principles of continuous improvement.	[SK5] Assessment of ability to solve problems that arise in practice [SK4] Assessment of communication skills, including language correctness [SK3] Assessment of ability to organize work [SK2] Assessment of progress of work
	[K7_W01] knows and understands to a greater extent selected issues in the field of management and quality sciences and mechanical engineering, their location in the field of social sciences and engineering and technical sciences, as well as relationships with related disciplines, and sees the possibility of applying the knowledge in practice	The student is able to define the goals and principles of the supply chain in terms of logistics, determines the structure of the chain along with the streams of flow of goods and information and adaptation to the needs of the market.	[SW1] Assessment of factual knowledge [SW3] Assessment of knowledge contained in written work and projects [SW2] Assessment of knowledge contained in presentation
	[K7_U05] is able - in accordance with a given specification, taking into account non-technical aspects - to design a complex device, object, system or process related to the studied engineering discipline, and to implement this project - at least in part - using appropriate methods, techniques and tools, if necessary, adapting to it the purpose of existing or developing new tools	The student is able to design the structure of processes, the arrangement of workstations and objects with the use of methods and tools commonly used for this purpose and modifications created for the needs of non-standard solutions.	[SU4] Assessment of ability to use methods and tools [SU3] Assessment of ability to use knowledge gained from the subject [SU1] Assessment of task fulfilment
	[K7_W04] has an organized knowledge of the life cycle of devices, facilities and technical systems, has an extensive knowledge of management.	The student identifies, selects analytical methods, analyzes, determines relationships, formulates conclusions and recommendations for the management and control of logistics processes.	[SW3] Assessment of knowledge contained in written work and projects [SW1] Assessment of factual knowledge

Subject contents	**Lectures:** Logistics concept and development; supply chain management; logistics systems; analysis of logistics systems; logistic channels; supply logistics; production logistics; distribution logistics; logistics and marketing; logistic costs of enterprises; environmental protection logistics; logistics services (outsourcing). **Design exercises:** Logistic decision problems in: customer service, transport management, inventory management, storage, location of logistics facilities; transport and forwarding; transport logistics: road, rail, air, inland waterway, sea, combined, urban. The student learns the goals and principles of the supply chain operation in terms of logistics: minimizing the costs resulting from the flow of goods and information while maintaining a good level of customer service; short order fulfillment times as well as trouble-free and flexible deliveries; optimizing the level of inventories along with adjusting to the needs of the market. The student learns the methods and tools used in supply chain management: • LM (Lean management) - slimming management • QR (Quick Response) - quick response • AM (Agile Management) - flexible management • TQM (Total Quality Management) - comprehensive quality management • BPR (Business Process Reengineering) - redesign of the business process • TBM (Time Based Management) - time management • Six Sigma • ECR (Efficient Consumer Response) - effective service in customer supply chains • JiT (Just in time) - just on time • SCOR- (Supply Chain Operation Reference-Model) - the reference model of the supply chain • VMI (Vendor Management Inventory) - inventory management by the supplier By expanding knowledge and performing simple design exercises related to the analyzed areas of supply chain issues, the student can independently design a supply chain management system, starting from the development of a supply system and an optimized technological line, through the evaluation and selection of suppliers, and ending with efficient distribution.
Prerequisites and co-requisites	
Assessment methods and criteria	

Subject passing criteria	Passing threshold	Percentage of the final grade
Written exam	60.0%	50.0%
Project	60.0%	50.0%

Recommended reading	Basic literature	Ballou R.: Business Logistics Supply Chain Management. Prentice Hall, 2004. Pienaar W.: Business Logistics Management. Oxford University Press, 2009. Rutkowski K. (ed.): Best Practices in Logistics and Supply Chain Management the Case of. SGH, 2009. Witkowski Jarosław, Zarządzanie łańcuchem dostaw: Koncepcje, Procedury, Doświadczenia., PWE 2003 Ciesielski Marek, Instrumenty zarządzania łańcuchami dostaw., PWE 2009 Christopher Martin, Logistyka i zarządzanie łańcuchem dostaw., Polskie Centrum Doradztwa Logistycznego 1992 Bozarth Cecil B., Handfield Robert B., Wprowadzenie do zarządzania operacjami i łańcuchem dostaw., Helion 2007 Gołembska Elżbieta, Kompendium wiedzy o logistyce., PWN 1999 Sarjusz-Wolski Zdzisław, Sterowanie zapasami w przedsiębiorstwie., PWE 2000 Kenneth Lysons, Zakupy zaopatrzeniowe., PWE 2004 Yann Bouchery, Jan Fransoo, Charles J. Corbett, Tarkan Tan, Sustainable Supply Chains: A Research-Based Textbook on Operations and Strategy., Springer 2016
	Supplementary literature	Supply Chain Management Review , www.scmr.com Logistics Management, www.logisticsmgmt.com Supply Management, www.supplymanagement.com Bartłomiej Gawin, Systemy informatyczne w zarządzaniu procesami Workflow. PWN 2020 Wojewódzka-Król Krystyna , Rolbiecki Ryszard, Infrastruktura transportu. Europa, Polska teoria i praktyka, PWN 2018 Dani Samir, Strategic Supply Chain Management: Creating Competitive Advantage and Value Through Effective Leadership., Amazon Books 2019
	eResources addresses	Adresy na platformie eNauczanie: Zarządzanie procesami logistycznymi, ZiIP, IIst., sem02, specj. ZSP, zima 23/24 - Moodle ID: 32571 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=32571

Example issues/ example questions/ tasks being completed	• LM (Lean management) - slimming management • QR (Quick Response) - quick response • AM (Agile Management) - flexible management • TQM (Total Quality Management) - comprehensive quality management • BPR (Business Process Reengineering) - redesign of the business process • TBM (Time Based Management) - time management • Six Sigma • ECR (Efficient Consumer Response) - effective service in customer supply chains • JiT (Just in time) - just on time • SCOR- (Supply Chain Operation Reference-Model) - the reference model of the supply chain • VMI (Vendor Management Inventory) - inventory management by the supplier
Work placement	Not applicable