

Subject card

Subject name and code	Supply chain management in a low-carbon economy - exercises, PG_00170004						
Field of study	Economics						
Date of commencement of studies	October 2025		Academic year of realisation of subject		2026/2027		
Education level	Bachelor's studies		Subject group		Obligatory subject group in the field of study Optional subject group		
Mode of study	full-time studies		Mode of delivery		at the university		
Year of study	2		Language of instruction		Polish Polish		
Semester of study	4		ECTS credits		1.0		
Learning profile	academic		Assessment form		credit		
Conducting unit							
Name and surname of lecturer (lecturers)	Subject supervisor		dr Dorota Książkiewicz				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	15.0	0.0	0.0	0.0	15
	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	15		5.0		5.0	25
Subject objectives	The course aims to familiarize students with the key aspects of supply chain management in the context of a low-carbon economy. It is designed to develop knowledge and skills related to the integration of sustainable practices, reduction of greenhouse gas emissions, and the implementation of innovative solutions within supply chains that support both ecological and economic goals of modern enterprises.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[EKONL3_W05] has advanced knowledge of man as a subject who creates social structures and the principles of their functioning and of his action in these structures, knows well the motives of human economic decision-making	Has advanced knowledge of the human being as a participant in the supply chain and as a decision-maker shaping it in the context of sustainable development. Understands the motivations behind economic decisions aimed at emission reduction and is able to analyze their social and environmental consequences.	[SW1] oral statement/conversation/discussion [SW2] presentation/project/paper/report
	[EKONL3_U04] can predict and forecast the course of economic and social processes and phenomena	is able to anticipate the course of economic and social processes and phenomena occurring in supply chains, especially in the context of the transition towards a low-carbon economy, and to forecast their impacts on enterprises and the environment.	[SU1] oral statement/conversation/discussion [SU2] presentation/project/paper/report
	[EKONL3_W03] has advanced knowledge of the relations between economic agents and social organisations operating in the national, international and intercultural arenas	has advanced knowledge of the relationships between economic entities and social organizations operating in the national, international, and intercultural environment of supply chains, with particular emphasis on sustainable development and the low-carbon economy.	[SW2] presentation/project/paper/report
	[EKONL3_W08] has knowledge of the processes of changing elements, enterprises and whole structures of economic organisations, as well as the processes of changing social institutions, knows what their causes, course, scale, consequences are and what the influence of external stakeholders is on them	Has knowledge of the processes of change in elements, enterprises, and entire structures of economic organizations, as well as changes in social institutions, with particular emphasis on aspects related to the transition to a low-carbon economy. Understands the causes, course, scale, and consequences of these changes, and is aware of the influence of external stakeholders on these processes.	[SW2] presentation/project/paper/report
	[EKONL3_K03] participates in the preparation of economic and social projects, being able to reconcile legal, economic, ecological, political and social requirements	participates in the preparation of socio-economic projects in the field of supply chain management, being able to reconcile legal, economic, ecological, political, and social requirements, with particular emphasis on the goals of the low-carbon economy.	[SK2] presentation/project/paper/report
Subject contents	1. The Specificity of Modern Supply Chains Case Studies in Supply Chain Management and Optimization 2. Principles of a Low-Emission Economy and Its Importance for Supply Chain Management 3. Identification of Greenhouse Gas Emission Sources in the Supply Chain and Methods of Measurement 4. Analysis of Emission Reduction Strategies in Logistics and Transportation 5. Sustainable Inventory and Warehouse Management in the Context of a Low-Emission Economy 6. Technologies and Innovations Supporting Low-Emission Supply Chains 7. The Role of Partnerships and Collaboration in Building Low-Emission Supply Chains 8. Analysis of Supply Chain Management Trends in the Context of Global Ecological Transformation Students have the opportunity to receive additional substantive assistance during consultations with the course instructor.		
Prerequisites and co-requisites	Basic knowledge of supply chain management and logistics processes.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	discussion	51.0%	20.0%
	presentation	51.0%	80.0%

Recommended reading	Basic literature	Robert Stanisławski, Andrzej Szymonik, Artur Błaszczuk : Nowoczesna koncepcja ekologii. Difin 2021 Zrównoważona logistyka. Praca zbiorowa pod red. K. Kolasieńskiego-Morawskiej i M. Ziółko, CeDeWu 2023 D. Książkiewicz: Rozwój transportu, spedycji i logistyki w dobie cyfryzacji i globalnej gospodarki, Wydawnictwo UG 2021. Adam Koliński, Michał Adamczak, Innowacyjne technologie w logistyce - koncepcja zrównoważonego rozwoju, e-book Wydawnictwo Spatium, 2024
	Supplementary literature	Krzysztof Małachowski, Gospodarka a środowisko i ekologia. CeDeWu 2023
	eResources addresses	
Example issues/ example questions/ tasks being completed	What is the concept of a low-emission supply chain and what are its key elements? What are the main sources of CO emissions in traditional supply chains? Provide examples from different sectors.	
Work placement	Not applicable	

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