University of Gdańsk

Subject card

Subject name and code	Logistics in E-business , PG_00200455						
Field of study	Logistics and Mobility						
Date of commencement of studies	October 2026		Academic year of realisation of subject		2028/2029		
Education level	Bachelor's studies		Subject group		Obligatory subject group in the field of study 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		English		
Semester of study	6		ECTS credits		2.0		
Learning profile	academic		Assessment form		credit		
Conducting unit							
Name and surname of lecturer (lecturers)	Subject supervisor		mgr Dariusz Weiland				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	15.0	0.0	15.0	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		0.0		20.0	50
Subject objectives	The objective of the course **"Logistics in E-business"** is to equip students with practical knowledge and skills related to the design, operation, and optimization of logistics processes in the digital business environment. The course focuses on the role of logistics as a key enabler of value creation in e-commerce and platform-based business models. The course enhances students entrepreneurial mindset, readiness for innovation, and adaptability to the fast-changing e-business logistics landscape.						

Learning outcomes

Course outcome	Subject outcome	Method of verification
[LML3_W06] knows to an advanced degree selected methods and tools, including statistical techniques, to describe and model logistics and mobility processes and systems	The student has advanced knowledge of analytical tools and digital methods (including statistics) used to model and optimize logistics in e-business.	[SW4] test/exam - oral or written [SW1] oral statement/ conversation/discussion
[LML3_U04] is able to predict the course of logistics and mobility processes and systems	The student can anticipate and interpret key processes in e-logistics systems, such as order fulfillment, last-mile delivery, and reverse logistics.	[SU1] oral statement/conversation/ discussion [SU5] implementation of a problem task
[LML3_K04] is ready to think and act in an entrepreneurial manner; adapts to new situations and conditions, takes on the challenges of creative thinking, is resilient to failure, knows how to identify threats and assess the risk of their occurrence	The student demonstrates entrepreneurial thinking in solving e-logistics challenges, adapts to innovation, and is aware of digital risk factors.	[SK1] oral statement/conversation/ discussion [SK5] implementation of a problem task
[LML3_W11] knows the general principles of creating and developing forms of individual entrepreneurship, using knowledge of economics, finance, management sciences, logistics and mobility	The student knows the general principles of creating and developing online logistics-related business initiatives, based on interdisciplinary knowledge.	[SW4] test/exam - oral or written [SW1] oral statement/ conversation/discussion
[LML3_W05] has a knowledge of a human being as an entity that creates social structures and the principles of their functioning	The student has advanced understanding of the human aspect in digital logistics systems, including customer behavior and the role of end users.	[SW4] test/exam - oral or written [SW1] oral statement/ conversation/discussion
[LML3_W02] has advanced knowledge of different types of entities that require logistics support or provide logistics services	The student understands the roles and logistics needs of various stakeholders involved in e-business ecosystems, such as e-retailers, platforms, and carriers.	[SW4] test/exam - oral or written [SW1] oral statement/ conversation/discussion

Subject contents

Exercise content:
1. Introduction to e-logistics: actors, flows, and systems: Overview of logistics in e-business; mapping of digital supply chains; discussion: platforms vs. retailers
2. Order fulfillment and inventory strategies in e-commerce: Centralized vs. decentralized fulfillment; case comparison: Amazon vs. Zalando; mini-task: layout simulation
3. Last-mile delivery and urban logistics challenges: Models of last-mile delivery; smart lockers, crowdshipping, green logistics; map-based planning exercise
4. Reverse logistics and return management in e-business: Types of returns; customer satisfaction vs. cost; role-play: create a return policy for an online store
5. Digital tools and data in e-logistics: ERP/WMS/TMS systems; data flows, automation, tracking; tool-based analysis: order lifecycle tracking
6. Entrepreneurship in digital logistics: How to design a logistics startup; examples of logistics tech ventures; team work: sketch a value proposition

Consultations will be used to clarify more complex issues related to the class topics.

Prerequisites and co-requisites

The student should have:

Basic knowledge of logistics and supply chain management, acquired during previous subjects such as: Fundamentals of Logistics

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
test	51.0%	60.0%
Presentation/ speech (teamwork)	51.0%	40.0%

Recommended reading	Basic literature	Weiland, D., & Wierzbowski, P. (2021). Koncepcja Control Tower jako rozwiązanie problemów w procesach dystrybucji ostatniej mili dla przedsiębiorstw 3PL i 4PL - ujęcie teoretyczne. In C. Mańkowski & L. Reszka (eds.), Modelowanie procesów i systemów logistycznych (Vol. 22, pp. 87108). Wydawnictwo Uniwersytetu Gdańskiego. Weiland, D., & Wierzbowski, P. (2021). Sprawność procesów logistyki informacji w obliczu rozwoju sztucznej inteligencji. In C. Mańkowski & L. Reszka (eds.), Modelowanie procesów i systemów logistycznych (Vol. 22, pp. 259280). Wydawnictwo Uniwersytetu Gdańskiego. Weiland, D., & Wierzbowski, P. (2020). Logistyka informacji w gospodarce 4.0. Wydawnictwo Uniwersytetu Gdańskiego. Weiland, D. (2017). The logistics of information in customer service of online clothing shops. Roczniki Naukowe Wyższej Szkoły Bankowej W Toruniu, Article 16 3. https://doi.org/10.19197/tbr.v16i3.130 Weiland, D. (2017). The role of information in e-commerce. Transport Economics and Logistics, 68, 103115. https://doi.org/ 10.5604/01.3001.0010.5326 Weiland, D. (2016). Logistyka informacji jako podstawowy element w budowaniu przewagi konkurencyjnej w e-commerce. Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach, Article 306.
	Supplementary literature	Industry reports and publications (online): PwC Polska annual reports on the e-commerce market in Poland Gemius Polska E-commerce in Poland (latest edition) Last Mile Experts reports on last mile deliveries and city logistics Statista, McKinsey, Deloitte Insights international reports (in English)
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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