University of Gdańsk

Subject card

Subject name and code	IT Systems in Logistics, PG_00199899		
Field of study	Economics		
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 Optional subject group Subject group related to scientific research in the field of study
Mode of study	part-time studies	Mode of delivery	at the university
Year of study	3	Language of instruction	Polish
Semester of study	5	ECTS credits	3.0
Learning profile	academic	Assessment form	credit
Conducting unit	Department of Logistics -> Faculty of Economics -> Rector		
Name and surname of lecturer (lecturers)	Subject supervisor	dr Beata Chmiel	
	Teachers		

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	20.0	0.0	7.0	0.0	27

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	27	0.0	48.0	75

Subject objectives

1. Introduction of students to the collection of integrated IT systems in logistics.
2. Introduction of students to the classification of tools used for resource planning in logistics: ERP, WMS, and BI classes.
3. Presentation of basic concepts in information logistics, including workflow and document circulation within an enterprise.
4. Preparing students to use advanced solutions in IT systems in logistics, especially global ERP systems, WMS systems, and the use of barcodes and RFID technology.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[EKONL3_W06] has an advanced knowledge of selected methods and tools, including statistical and econometric techniques, for describing economic agents and structures as well as social institutions and the processes taking place in them	The student has advanced knowledge of IT solutions that support the implementation of logistics processes in various types of organizations.	[SW4] test/exam - oral or written [SW2] presentation/project/paper/ report
[EKONL3_U03] is able to analyse the causes and course of specific economic and social processes and phenomena, and accurately analyse these phenomena using adequate methods and tools economic and social	The student is able to manage the information flow process, including documentation, using appropriate IT methods and tools. The student uses IT technologies to carry out logistics processes.	[SU2] presentation/project/paper/ report [SU5] implementation of a problem task [SU8] observation of student's independent or team work
[EKONL3_K05] correctly identifies, diagnoses and resolves professional dilemmas and different options for solutions	The student can identify and resolve dilemmas related to the use of IT systems in the execution of logistics processes.	[SK1] oral statement/conversation/ discussion [SK2] presentation/project/paper/ report [SK8] observation of student's independent or team work

<table>
<tr><td>Subject contents</td><td>1. Information system as a component of information systems.
2. Demand and supply of information in information systems.
3. Network technologies and telematics as the foundation of the Internet of Things in Industry 4.0.
4. Modeling IT structure and database structure using Aris software.
5. Introduction to the use of ERP-class IT tools in supply chains. Case study implementation in SAP ERP and ELSE.ERP programs.
6. Introduction to the use of WMS-class IT tools in various business organizations. Barcodes and RFID technology. Traceability in supply chains. Case study implementation in ELSE.WMS program.

Any doubts regarding the issues discussed during classes can be discussed during consultations.</td></tr>
<tr><td>Prerequisites and co-requisites</td><td>Computer skills (Windows, MS Office), basic knowledge of English, ability to organize relationships between events and actions.</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>Students' activity during classes</td><td>51.0%</td><td>20.0%</td></tr>
<tr><td>Final test</td><td>51.0%</td><td>80.0%</td></tr>
</table></td></tr>
<tr><td>Recommended reading</td><td><table>
<tr><td>Basic literature</td><td>1. Chaberek, M.: Makro- i mikroekonomiczne aspekty wsparcia logistycznego. Wyd. Uniwersytetu Gdańskiego, Gdańsk 2002.
2. ELSE- materiały i instrukcje do wykonywania ćwiczeń.
3. SAP UA - materiały wprowadzające do case studies i instrukcje do wykonywania ćwiczeń.
4. Weiland, D., Wierzbowski, P., Logistyka informacji w gospodarce 4.0, Wyd. UG, Gdańsk 2020.
5. Szmelter-Jarosz, A., Informatyka w logistyce, pod red. S. Wryczy i J. Maślankowskiego, Wyd. PWN, Warszawa 2019.
6. Nowoczesne technologie w logistyce, pod red. J. Długosza, PWE, Warszawa 2009.
7. Szmelter, A., Business intelligence jako element systemu zaopatrzenia informacyjnego, Roczniki Naukowe Wyższej Szkoły Bankowej w Toruniu. - 2013, nr 12 (12), s. 127-142
8. Szmelter, A., Communication in global supply chains in automotive industry, Information Systems in Management 2015, Vol. 4, no 3, p. 205-218.</td></tr>
<tr><td>Supplementary literature</td><td>1. Lysons K., Zakupy zaopatrzeniowe. PWE, Warszawa 2004.
2. Christopher, M., Logistyka i zarządzanie łańcuchem podaży. Wydaw. Prof. Szkoły Biznesu, Kraków 1998.
3. Zintegrowane Systemy Zarządzania ERP w gospodarce wirtualnej, pod red. H. Sroki, Wyd. AE w Katowicach, Katowice 2009.</td></tr>
<tr><td>eResources addresses</td><td></td></tr>
</table></td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td>Solving case studies using the ELSE.ERP program.

Modeling the IT system structure of any enterprise using the Aris Express program.</td></tr>
<tr><td>Work placement</td><td>Not applicable</td></tr>
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