THE INTERNATIONAL UNIVERSITY OF LOGISTICS AND TRANSPORT IN WROCLAW

SYLLABUS

Teacher					
Course	Logistics Facilities and Distribution Management				
Module	Compulsory subjects	ECTS	5	Course code	23SM.P.L.A.21

Major	Speciality	Academic year
Logistics	Industrial systems engineering	2023/2024
Semester	FOURTH	Year of studies: SECOND

Type of studies	Full-time				Extramural			
Type of classes	Lecture	Exercise	Laboratories	Project	Lecture	Exercise	Laboratories	Project
Amount of hours	30	14	16					
TOTAL	60							

Course objectives	The course focuses on logistics facilities and distribution management, including internal material flow, storage strategies, material handling equipment, transportation modes, picking methods, yard operations, and selected optimization approaches.

Minimum knowledge required from the student before the classes beginning
none

Recommended literature to study before the classes beginning
Baker P., Canessa M., Warehouse Design: A Structured Approach, European Journal of Operational Research, Elsevier, 2018

LEARNING OUTCOMES			KEK	METHODS OF ASSESSMENT	
KNOWLEDGE	K01	Ability to analyse input, throughput and output parameters of logistics facilities	K2_W01_L_P	EM11	reports evaluation, case study
	K02	Understand theoretical foundations of logistics facilities, inventory and distribution systems	K2_W06_L_P	EM13	student presentations
	K03	Understand key challenges in planning and managing logistics facilities and distribution networks	K2_W06_L_P	EM15	evaluation of activity in the classroom
	K04	Ability to identify optimization problems in logistics facilities and inventory systems	K2_W08_L_P	EM11	reports evaluation, case study
	K05	Understand core concepts of inventory management and distribution operations in logistics facilities	K2_W06_L_P	EM13	student presentations
SKILLS	S01	Identify and differentiate functions and types of logistics facilities	K2_U01_L_P	EM1	oral examination
	S02	Analyse and improve logistics facility operations and distribution processes	K2_U09_L_P	EM14	continuous assessment
	S03	Apply selected inventory classification methods in logistics facility management	K2_U07_L_P	EM11	reports evaluation, case study
	S04	Select and apply appropriate inventory management strategies in logistics operations	K2_U02_L_P	EM14	continuous assessment
	S05	Design basic conditions for storage and distribution processes within logistics facilities	K2_U03_L_P	EM14	continuous assessment
	SC01	The student is aware of the role of knowledge in solving problems related to logistics facilities management	K2_K02_L_P	EM16	evaluation of the work, co-operation of students in the classroom (verification of the acquired social competences)
	SC02	The student knows examples of distribution systems and understands differences between them in various logistics contexts	K2_K05_L_P	EM15	evaluation of activity in the classroom

SOCIAL COMPETENCE	**SC03**	**The student understands key inventory management strategies (pull and push), service level concepts, safety stock, EOQ, ROP, FOI and classification methods (ABC/XYZ) in logistics operations**	K2_K01_ L_P	**EM16**	evaluation of the work, co-operation of students in the classroom (verification of the acquired social competences)
	SC04	**The student knows examples of documentation used in logistics facilities and understands differences between them**	K2_K01_ L_P	**EM16**	evaluation of the work, co-operation of students in the classroom (verification of the acquired social competences)

Course contents	Lecture	logistics facilities design and operations, warehouse input, throughput and output processes, inventory planning, and distribution management
	Exercises	Calculation of parameters in inventory and warehouse management, case studies and problem-solving tasks
	Laboratories	SAP transactions in warehouse management systems
	Projects	presentation on a given topic

Teaching methods	**TM5**	**Problem lecture**
	TM8	**Projects method**

Obligatory literature	1	Richards G., Warehouse Management: A Complete Guide to Improving Efficiency and Minimizing Costs in the Modern Warehouse, Kogan Page, 2018
	2	Frazelle E., World-Class Warehousing and Material Handling, McGraw-Hill Education, 2016
	3	Gu J., Goetschalckx M., McGinnis L.F., Research on Warehouse Operation: A Comprehensive Review, European Journal of Operational Research, Elsevier, 2019

Additional literature	1	Bartholdi J.J., Hackman S.T., Warehouse & Distribution Science, The Supply Chain and Logistics Institute, 2019
	2	
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Requirements to pass the course
>50 % presence, active participation in classes, tests and case studies, the presentation