Polish course name	KOSZTY LOGISTYKI PRZEDSIĘBIORSTW			
English course name	ENTERPRISE LOGISTICS COSTS			
Course code	WIP-MDL-D1-ELC-04			
Field of study	Materials design and logistics			
Level of qualification	First degree			
Form of study	Full-time			
Semester	4			
Number of ECTS points	3			
Ways of assessment	Test			

#### Number of hours per semester

Lecture	Seminar	Classes	Laboratory	Project
15		15		

#### **TEACHERS:**

Dr hab. inż. Beata Ślusarczyk, prof. PCz.,

Dr Katarzyna Grondys.

#### **COURSE OBJECTIVES:**

- > C1 Identification of logistics costs in the enterprise.
- > C2 Analysis of the level and structure of logistics costs in the enterprise.

# PRELIMINARY REQUIREMENTS FOR KNOWLEDGE, SKILLS AND OTHER COMPETENCES:

- 1. Basic knowledge of logistics processes.
- 2. Ability to use basic computer programs such as text editor, spreadsheet.
- 3. Ability to analyze economic processes.

#### **COURSE CONTENT**

## LECTURE

- L1 L4 The essence and concepts of logistics costs. Classification crosssections of logistics costs.
- > L5 L8 Model approach to logistics costs transport and inventory costs.
- > L9 L11 Model approach to logistics costs costs of IT processes. Logistics cost interdependence and partial cost conflict. Global logistics costs.
- > L12, L13 Logistics costs in the company's accounting system.
- > L14, L15 Basic cost indicators of the evaluation of logistic processes in the enterprise. Logistic customer service costs.

## CLASSES

- > C1 C3 Specification of cost calculation in transport activity.
- > C4 C6 Calculation of transport order costs.
- > **C7, C8** Minimization of transport costs in the logistics system.
- C9 C11 Calculation and optimization of warehouse and warehouse space costs. Inventory costing.
- C12 C14 Calculation of the global costs of the company's logistics. Application of investment effectiveness assessment methods (NPV, IRR) to verify the decision on the purchase of means of transport by an enterprise.
- > C15 Test

## **BASIC REFERENCES**

- Skoczylas K., Koszty i controlling logistyki w przedsiębiorstwie, Oficyna Wydaw. Politechniki Rzeszowskiej, Rzeszów 2010 r.
- Bentkowska-Senator K., Kordel Z., Waśkiewicz J., Polski transport samochodowy: rynek, koszty, cena, Wydaw. Instytutu Transportu Samochodowego, Warszawa 2012 r.
- 3. Ślusarczyk B., Problemy ewidencjonowania i pomiaru kosztów logistyki w przedsiębiorstwach, Przegląd Organizacji, nr 10 (897), 2014 r., s. 37-43.
- 4. Ślusarczyk B., Kot S., Analiza kosztów logistyki w MSP, Gospodarka Materiałowa i Logistyka, nr 6 2013 r., s. 7-11.

#### SUPPLEMENTARY REFERENCE MATERIALS

1. Ślusarczyk B., Costs aspects of creating 3PL logistic operators' offers, Zeszyty Naukowe Politechniki Śląskiej Organizacja i Zarządzanie, nr 116, 2018 r., s.

163-

176.

 Grondys K., Brzeziński S., Optimization of Gross Margin in Outsourcing of Management of Inventory of Spare Parts of Production Equipment, Applied Mechanics and Materials Vol.708/2015.

# LEARNING OUTCOMES

- > **EU1** Student is able to identify the costs of logistics in the enterprise and determine the place where they arise.
- EU2 The student is able to estimate the costs of logistics processes and global logistics costs.
- > **EU3** The student knows the specificity of logistics costs in the company's accounting system.

# **TEACHING TOOLS**

- > Multimedia presentations.
- > E-learning platform.
- > Sets of calculation tasks.

## WAYS OF ASSESSMENT (F – FORMATIVE, P – SUMMATIVE)

- > F1. Assessment of tasks and activities optionally performed in e-learning.
- > P1. Assessment of the teaching material from the exercises test.

## STUDENT WORKLOAD

Form of activity	Number of hours	ECTS			
Contact hours with the teacher					
Lectures	15	0,6			
Seminar					
Classes	15	0,6			
Laboratory					
Project					

Test	3	0,12
Exam		
Total contact hours	33	1,32
Student's own work	<	
Getting acquainted with the indicated literature	15	0,6
Preparation for seminar		
Preparation for classes	15	0,6
Preparation for lab		
Project preparation		
Consultation	3	0,12
Preparation for the test	9	0,36
Total student's own work	42	1,68
Total number of hours/ ECTS points for the	75	3,0
course		

# ADDITIONAL INFORMATION

Timetable of classes	USOS
Information about the consultation (time + place)	https://wz.pcz.pl/katedra-logistyki

# MATRIX OF LEARNING OUTCOMES REALISATION

Learning outcome	Reference of given outcome to outcomes defined for whole program	Course objectives	Course content	Ways assessment	of
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EU 1	K_W02, K_W06, K_W07, K_U07, K_U09, K_K02, K_K03,	C1	L1 - L7, C1 - C6, C15	F1, P1
EU 2	K_W02, K_W06, K_W07, K_U07, K_U09, K_K02, K_K03,	C2	L8 - L11, C7 - C11, C15	F1, P1
EU 3	K_W02, K_W06, K_W07, K_U07, K_U09, K_K02, K_K03,	C2	L12 - L15, C12 -C15	F1, P1

## FORM OF ASSESSMENT - DETAILS

**EU1** Student is able to identify the costs of logistics in the enterprise and determine the place where they arise.

- > 2,0 The student is not able to identify logistics costs and their places of origin.
- > 3,0 The student partially identifies the costs of logistics and the places where they arise.
- > 3,5 The student can almost identify the costs of logistics and their places of origin.
- > 4,0 The student is able to identify logistics costs well and where they arise.
- 4,5 The student identifies logistics costs and their places of origin almost very well.
- > 5,0 The student very well identifies the costs of logistics and their place of origin and is able to carry out independent cost analyses.

**EU2** The student is able to estimate the costs of logistics processes and global logistics costs.

- > 2,0 The student is not able to define how the costs of logistics processes are estimated and what is their role in the global costs of logistics.
- > 3,0 The student is able to partially define how the costs of logistics processes are estimated and what is their role in the global costs of logistics.

- > 3,5 The student can almost define how the costs of logistics processes are estimated and what is their role in the global costs of logistics.
- > 4,0 The student is able to define well how the costs of logistics processes are estimated and what is their role in the global costs of logistics, but does not interpret the obtained results.
- > 4,5 The student can almost very well define how the costs of logistics processes are estimated and what is their role in the global costs of logistics and interpret the results obtained.
- > 5,0 The student is very well able to define how the costs of logistics processes are estimated and what is their role in global logistics costs, and interprets the obtained results and can predict changes in the calculated result caused by specific managerial decisions.

**EU 3** The student knows the specificity of logistics costs in the company's accounting system.

- 2,0 The student is not able to characterize the specificity of logistics costs in the company's accounting system.
- 3,0 The student is able to partially determine the specificity of logistics costs in the company's accounting system.
- > 3,5 The student can almost determine the specificity of logistics costs in the company's accounting system.
- > 4,0 The student is able to determine the specificity of logistics costs in the company's accounting system.
- 4,5 The student can almost very well determine the specificity of logistics costs in the company's accounting system.
- > 5,0 The student very well define the specificity of logistics costs in the company's accounting system, distinguishes the possibilities of recording logistics costs.