### **COURE GUIDE**

Subject name	Production logistics
Course of study	Quality and Production Management
The form of study	Full time
<u>Level of qualification</u>	First
<u>Year</u>	II
<u>Semester</u>	IV
The implementing entity	Department of Logistics and International
	Management
The person responsible for preparing	Dr Marta Daroń
<u>Profile</u>	General academic
ECTS points	3

#### TECHNINING METHODS - NUMBER OF HOURS PER SEMESTER

LECTURE	CLASS	LABORATORY	PROJECT	SEMINAR
15	15			-

### **COURSE AIM**

- C1. Presentation and discussion of basic issues related to production logistics.
- C2. Presentation and use of theoretical and practical knowledge in the field of production logistics to solve practical problems.

## ENTRY REQUIREMENTS FOR KNOWLEGE, SKILLS AND OTHER COMPETENCE

- 1. The student has a basic knowledge of production management.
- 2. The student has the basic ability to use the basic office software.
- 3. The student has a basic knowledge of the design of logistics processes.

### **LEARNING OUTCOMES**

EU1. The student knows the basic tasks of production logistics and production planning and stock levels

in enterprises.

- EU2. The student knows integrated IT systems related to production logistics.
- EU3. The student knows the principles of designing internal transport routes and the issue of internal transport.
- EU4. The student knows the methods of scheduling the working time of equipment and logistics personnel in the production departments.

### **COURSE CONTENT**

Type of teaching – LECTURE	Number of hours
W1. General theory of the basics of logistics, separation of the production logistics subsystem and its location in the logistics system of the production enterprise. Introduction to the e-learning course.	1
W2. Object, scope and characteristics of production logistics.	1
W3. Stocks in progress.	1
W4. Logistic network design, integrated production support systems - OPT.	1
W5-W6. Integrated production support systems - MRP, MRP II.	2
W7-W8. Integrated production support systems — ERP, CIM.	2
W9. Integrated production support systems - JiT.	1
W10. Rules for controlling the flow of materials and raw materials in the KAN-BAN system.	1

	4
W11-W12. Internal transport - requirements, means of transport.	1
W13. Storage equipment at production departments.	1
W14. Types and forms of production and their impact on the production logistics system.	1
W15. Repetition and completion of lectures.	1
Type of teaching – CLASS	Number
	of hours
C1. Introductory classes, repeating basic information about logistics systems, with	1
particular emphasis on production logistics.	1
C2,C3. Discussion of issues related to production planning and inventory by demand	2
forecast, exercise and task.	2
C4,C5. Discussion of issues related to production planning and inventory state according to	2
a fixed production schedule equal to nominal production capacity, exercise and task.	2
C6,C7. Discussion of issues related to the planning of production and stock levels	
according to a constant production schedule equal to the average demand, exercise and	2
task.	
C8. Test.	1
C9,C10. Discussing the issues of scheduling equipment and logistic personnel time in	2
production departments, tasks.	2
C11,C12. Internal transport issues, exercises.	2
C13,C14. The economic size of the production series.	2
C15. Test.	1

## **TEACHING TOOLS**

- Books and monographs.
   Audiovisual equipment.
   Original examples, tasks and exercises.
- 4. E-learning platform.

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

- F1. Checking test.
- F2. E-learning tasks evaluation.
- P1. Final test.
- P2. Exam.

## STUDENT WORKLOAD

Form of activity		Average number of hour for realization of the activity		
		[h]	ECTS	ECTS
Contact hour with teacher	Lecture	15	0.66	1 20
Preparation for lecture		12	0.73	1.29
Contact hour with teacher	Class	15	0.66	0.02
Preparation for class		8	0.27	0.93
Getting acquainted with the indicated literature		10	0.28	0.28
Participation in consultations		15	0.60	0.60
TOTAL NUMBER OF HOURS/ECTS POITS FOR THE COURSE		75	3	3

### BASIC AND SUPPEMENTARY RESOURCE MATERIALS

#### **Basic resources**

- 1. Bendkowski J., Matusek M. Logistyka produkcji: praktyczne aspekty. Cz. 1. Planowanie i sterowanie produkcją. Gliwice, Wydaw. Politechniki Śląskiej, 2013.
- 2. Bendkowski J., Matusek M. Logistyka produkcji: praktyczne aspekty. Cz. 2. Narzędzia, metody, systemy. Gliwice, Wydaw. Politechniki Śląskiej, 2013.
- 3. Bendkowski J., Matusek M. Logistyka produkcji: praktyczne aspekty. Cz. 3. Studia przypadków. Gliwice: Wydaw. Politechniki Ślaskiej, 2013
- 4. Szymonik A. (red.) Logistyka produkcji: procesy, systemy, organizacja. Difin, Warszawa 2012.
- 5. Fertsch M., Cyplik P., Hadaś Ł. Logistyka produkcji: teoria i praktyka. Poznań, Instytut Logistyki i Magazynowania, 2010.

### **Supplementary resources**

- 1. Jonak J., Nieoczym A. Logistyka w obszarze produkcji i magazynowania. Wydaw. Politechniki Lubelskiej, Lublin 2014.
- 2. Harris R., Harris C., Wilson E. Logistyka wewnętrzna fabryki wg zasad Lean Manufacturing: przewodnik po systemie zarządzania materiałami dla specjalistów z produkcji, zarządzania produkcją, zakupów, zaopatrzenia oraz technologii. Wydaw. Lean Enterprise Institute Polska, Wrocław. 2013.
- 3. Daroń M., Górska M., Wybrane problemy zarządzania zapasami w przedsiębiorstwie produkcyjnym. Logistyka 5, 2013.
- 4. Daroń M., Górska M., Doskonalenie procesów logistycznych na przykładzie wybranego przedsiębiorstwa. Logistyka 5, 2013.
- 5. Daroń M., Górska M., Luterek M., Budzik R., Model gospodarki magazynowej w strategii logistycznej przedsiębiorstwa. Logistyka 2, 2010.
- 6. Daroń M., Górska M., Wybrane zagadnienia gospodarki magazynowej w przedsiębiorstwie handlowym. Gospodarka Materiałowa & Logistyka 5, 2013.
- 7. Daroń M., Górska M., Analiza wykorzystania urządzeń transportowych w magazynie wyrobów gotowych. Logistyka 5, 2011.

### TEACHERS (NAME, SURNAME, ADRES E-MAIL)

dr Marta Daron, marta.daron@wz.pcz.pl

#### MATRIX OF LEARNING OUTCOMES REALISATION

Learning outcome	Reference of given outcome to outcomes defined for whole program (PRK)	Course aims	Course content	Teaching tools	Ways of assessment
EU1	K_W01, K_W02, K_W03, K_W08, K_W10, K_U01, K_U02, K_U04, K_U05, K_U10, K_U11, K_K02	C1, C3	W1, W4, W10, W11, W14, W15, C1-C3 C12- C16	1, 2,4,5	F1, F2, P1
EU2	K_W01, K_W02, K_W03, K_W05, K_W08, K_W10, K_U01, K_U02, K_U04, K_U05, K_U10, K_U11, K_K02	C2, C3	W1, W2, W4, W10-W13, C1, C4-C11, C30	1, 2, 3,4	F1, P1
EU3	K_W01, K_W02, K_W03, K_W07, K_W08, K_W10, K_U01, K_U02, K_U04, K_U05, K_U09, K_U10, K_U11, K_K02	C2, C3	W1, W5, W6, W7- W9, W14, C17-C25, C30	1, 2, 3,4,5	F1, F2, P1
EU4	K_W01, K_W02, K_W03, K_W08, K_W10, K_U01, K_U02, K_U04, K_U05, K_U10, K_U11, K_K02	C1, C2, C3	W1-W3, W5, W10, W11, W14, W15 C21-C30	1, 2, 3, 4,5	F1, F2, P1

### FORM OF ASSESSMENT - DETAILS

	grade 2	grade 3	grade 4	grade 5
	The student does	The student knows	The student knows	The student knows the types
EU1	not know the basic types of security measures used in process installations.	the basic types of security measures.	the types of security measures, can divide into individual and collective protection.	of security measures, including individual and collective protection measures. He can determine the role of organizational activities.
EU2	The student does not know the technical and legal requirements regarding various security measures both in relation to machinery, equipment and process installations as well as infrastructure.	The student knows the basic technical and legal requirements for typical security measures.	The student knows the technical and legal requirements regarding various security measures both in relation to machines, devices or installations as well as infrastructure.	The student knows the technical and legal requirements regarding various security measures both in terms of installation and infrastructure, and is able to analyze their correlation.
EU3	The student can not analyze the hazards associated with process installations.	The student is able to analyze the threats. He knows some types of technical security measures.	aspect of choosing the right security measures.	The student is able to analyze hazards and select security measures. He can determine their relationship with organizational measures.
EU4	The student can not choose preventive activities and appropriate security measures for typical process installations.	The student can propose appropriate security measures for typical process installations.		Student is able to choose prophylactic activities and appropriate security measures for the installation and knows the principles of cooperation with emergency services.

### ADDITIONAL USEFUL INFORMATION ABOUT THE COURSE

- 1. Information where presentation of classes, instruction, subjects of seminars can be found, etc. presented to students during first classes, if required by the formula classes are sent electronically to the e-mail addresses of individual dean groups.
- 2. Information about the place of classes Information can be found on the website of the Faculty of Management.
- 3. Information about the timing of classes (day of the week / time) Information can be found on the website of the Faculty of Management.

Information about the consultation (time + place) - Information can be found on the website of the Faculty of Management.