COURSE GUIDE

Subject name	Design of logistics systems and processes
Course of study	Logistics
The form of study	Full-time
Level of qualification	Second
Year	I
<u>Semester</u>	II
The implementing entity	Katedra Informatyki Ekonomicznej i Ekosystemów Zarządzania
The person responsible for preparing	Paula Bajdor
<u>Profile</u>	General academic
Course type	principal
ECTS points	5

TYPE OF TEACHING - NUMBER OF HOURS PER SEMESTER

LECTURE	CLASS	LABORATORY	PROJECT	SEMINAR
15	30	-	-	-

COURSE AIMS

- C1. Presentation of logistics systems and processes
- C2. Achievement of skills concerning design of processes with the usage of BPMN, UML
- 2.1 notation

ENTRY REQUIREMENTS FOR KNOWLEDGE, SKILLS AND OTHER COMPETENCES

- 1. The student possesses basic skills concerning computer operation
- 2. The student is able to interpret data included in tables and graphs.
- 3. The student can use the Internet services: WWW, e-mail, etc.

LEARNING OUTCOMES

- **EU 1-** The student possesses basic theoretical knowledge concerning the notion, identification and classification of logistics systems and processes
- **EU 2-** The student possesses knowledge and skills concerning design of logistics processes in BPMN and UML notation
- **EU 3-** The student is able to design in practice basic selected logistics processes using appropriate application such as e.g. DIA software

COURSE CONTENT

	Type of teaching – LECTURES	Number of hours
L 1	The notion and classification of logistics systems	1
L 2	Process approach in logistics	1
L 3	Identification and classification of logistic processes and methods used in its design.	1
L 3	Different approaches to designing a logistics system	1
L 4	Implementation and maintenance of logistic systems	1
L 5	Analysis methods of logistic processes	1
L 6	Improvement of logistic processes. Total quality management and six sigma concept	1
L 7	Logistics decision modeling.	1
L 8	Tools for design of logistic processes on the basis of DIA application	1
L 9	Process performance	1
L 10	Characteristic of SCM systems	1
L 11	Characteristic and practical examples of storage process	1
L 12	Characteristic and practical examples of procurement process	1
L 13	Characteristic and practical examples of transportation process	1
L 14	Characteristic and practical examples of communication process	1
L 15	Characteristic and practical examples of material flow process	1
	Type of teaching – CLASSES	Number of hours
C1	Introductory lesson - organizational issues. Discussion of definitions connected with the subject. Presentation of logistic systems definition. The notion of logistics processes. Review of modeling elements.	2
C2	Design of procurement process	4
C3	Design of storage process	4
C4	Design of transportation process	4
C5	Design and analysis of material flow process	4
C6	Design and analysis of communication process	4
C7	Analysis of selected supply chain management system	4
C8	Presentation and assessment of projects	4

TEACHING TOOLS

- 1. Coursebooks
- 2. Audiovisual equipment
- 3. Laboratory instructions
- 4. A computer with an access to the Internet and installed DIA application

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

- F1 Presentation of assignments
- F2 Students' active participation in classes

P1 Projects of logistic processes

STUDENT WORKLOAD

Form of activity		Average number of hours for realization of the activity [h]
Contact hours with the teacher CLASSES		45
Preparation for classes		40
Preparation for tests		35
Consultations		5
TOTAL NUMBER OF HOURS / ECTS POINTS FOR		125 / 5
THE COURSE		

BASIC AND SUPPLEMENTARY RESOURCE MATERIALS

Basic resources:

1.	Kumar A., Business Process Management, New York, Routlegde, 2018.
2.	Weske m., Business Process Management: Concepts, Languages, Archotectures, Berlin, Springer-Verlag, 2012.
3.	Lenort R., Production Logistics Concepts and Systems: Potential for Use in Metallurgical Processing Companies, 2010

Supplementary resources:

1.	Jeston J., Business Process Management: Practical Guidelines to Succesfully Implementations, London: Routledge 2014
2.	Dumas M., Fundamentals of Business Process Management, Heidelberg: Springer 2013.
3.	Panagacos T., The ultimate Guide to Business Process Management: Everything You Need to Know and How to Apply it to Your Organization, Melbourne, 2012.

TEACHERS (NAME, SURNAME, E-MAIL ADDRESS)

1. Leszek Ziora, Ph.D. ziora@zim.pcz.pl

MATRIX OF LEARNING OUTCOMES REALISATION

Learning outcome	Reference of given outcome to outcomes defined for whole program	Course aims	Course content	Teaching tools	Ways of assessment
EU 1 The student possesses basic theoretical knowledge concerning the notion, identification and classification of logistics systems and processes	K_W03, K_W04, K_W05, K_U01, K_U03, K_K05	C1-C2	L1 - L15	1,2, 3,4	F1, F2, P1
EU 2 The student possesses knowledge and	K_W02, K_W03,	C1-C2	L1-L15, C1- C8	1,2, 3,4	F1, F2, P1

skills concerning design	K_W07,				
of logistics BPMN and	K_W24,				
UML notation processes	K_U01,				
in	K_U03,				
***	K_K05				
EU 3 -The student is able to	K_W04,	C1-C2	C1- C8	1,2, 3,4	F1, F2, P1
design in practice basic	K_W06,				
selected logistics processes	K_W07,				
using appropriate	K_U03,				
application such as e.g.	K_U05,				
DIA software	K_K05.				

FORM OF ASSESSMENT - DETAILS

	grade 2	grade 3	grade 4	grade 5
EU 1	The student does not know or understand any definitions concerning the problem of logistics systems and processes design.	The student possess basic knowledge concerning the notion, identification, classification of logistics systems and processes.	The student possess good knowledge concerning the notion, identification, classification of logistics systems and processes.	The student possess good knowledge concerning the notion, identification, classification of logistics systems and processes and is able to present selected practical examples of such a processes.
EU 2	The student does not understand any basic BPMN or UML notation.	The student understands some basic BPMN or UML elements	The student knows most of BPMN or UML notation elements	The student knows very well BOMN or UML notation.
EU 3	The student cannot design any of presented during classes logistic processes	The student is able to design one logistic process with the usage of DIA application	The student is able to design two logistic process with the usage of DIA application	The student is able to design three logistic process with the usage of DIA application

ADDITIONAL USEFUL INFORMATION ABOUT THE COURSE

1.	Information where presentation of classes, instruction, subjects of seminars can be found, etc
	They are sent to the e-mail addresses of students

- Information on the place where the classes take place Such information is placed at www site of The Faculty of Management
- Information on the date of classes (day of the week/hour) Such an information can be found at www site of the Faculty of Management
- Information on consultation hours (hours + place) Such information is conveyed to students at the first class.

Coordinator