



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Operational management in logistics

### Course

Field of study

Logistics

Area of study (specialization)

Level of study

First-cycle studies

Form of study

full-time

Year/Semester

2 / 3

Profile of study

general academic

Course offered in

polish

Requirements

compulsory

### Number of hours

Lecture

15

Laboratory classes

Other (e.g. online)

Tutorials

15

Projects/seminars

### Number of credit points

4

### Lecturers

Responsible for the course/lecturer:

dr hab. inż. Katarzyna Grzybowska

email: katarzyna.grzybowska@put.poznan.pl

Faculty of Engineering Management

2 Jacek Rychlewski Str.

60-965 Poznań

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### Prerequisites

- student has a basic knowledge of management and organizational processes, including logistics processes, identify the stages of material flow in the enterprise;

- student able to identify the stages of material flow in the enterprise.

### Course objective

- introduce students with the problems of operational management in logistics processes,

- to develop skills in operating (current) management of logistics processes in the enterprise



### Course-related learning outcomes

#### Knowledge

1. knows the basic concepts of operational management in logistics - [P6S\_WG\_05]
2. knows the basic management issues specific to operational management in logistics - [P6S\_WG\_08]
3. knows the basic relationships in the framework of operational management in logistics - [P6S\_WK\_04]
4. knows the basic phenomena and contemporary trends characteristic of operational management in logistics - [P6S\_WK\_05]
5. knows the best practices in operational management in logistics - [P6S\_WK\_06]s

#### Skills

1. can search based on literature and other sources and present information on a problem within operational management in logistics - [P6S\_UW\_01]
2. is able to apply to solve the problem within the studied subject appropriate experimental and measuring techniques in operational management in logistics - [P6S\_UW\_03]
3. is able to assess and make a critical economic analysis of the selected problem, which falls within the framework of operational management in logistics - [P6S\_UW\_06]
4. is able to design, using appropriate methods and techniques, an object, system or process that meets the requirements of operational management in logistics - [P6S\_UW\_07]
5. is able to present, using properly selected means, a problem within operational management in logistics - [P6S\_UK\_01]
6. is able to identify changes in requirements, standards, regulations, technical progress and reality of the labor market, and based on them determine the needs of supplementing knowledge - [P6S\_UU\_01]

#### Social competences

1. is aware of the recognition of the importance of knowledge in the field of operational management in logistics in solving cognitive and practical problems - [P6S\_KK\_02]
2. is aware of initiating activities related to the formulation and transfer of information and cooperation in society in the field of operational management in logistics - [P6S\_KO\_02]
3. is aware of the responsible fulfillment, correct identification and resolution of dilemmas related to the logistics profession - [P6S\_KR\_01]

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment:

Lectures: acquired knowledge is verified on the basis of answers to questions about the material discussed during the lectures (two tests, differently scored).



Exercises: the acquired knowledge is verified on the basis of activity during the classes and assessment of the current progress of partial tasks carried out during the exercises (independent and group work, expressing own views and opinions).

Summative rating:

Lectures: acquired knowledge is verified on the basis of credit in writing (open questions, various points); credit is possible after obtaining a minimum of 60% of points.

Exercises: the acquired knowledge is verified on the basis of the results of the average of partial grades of forming assessment; passing exercises after getting at least 3.0.

### Programme content

1. logistics system; Process management; Flow and synchronization;
2. Mapping operational processes of logistics (mapping methods - algorithms, IDEF); Flowchart technique; Defining symbols; Visualization of work flow; Identify actions that add and add values; Identification of opportunities for improvement (Kaizen);
3. Flow mapping; Vulnerability analysis of current activities and necessary functions; Demand change buffer; forecast and plan; flow and synchronization; Identify, track, and implement key performance indicators (KPIs); Identification of process improvement opportunities (DMAIC; PDCA);
4. Analysis using mapping techniques; Identifying opportunities to improve processes;
5. Identification of errors in algorithms and schemes and correct algorithms;
6. Elaboration of algorithm of selected process - elaboration of procedure;
7. Process maps according to IDEF methodology;
8. Algorithms of selected activities; Troubleshooting Techniques (Processes: Defining a Problem, Gathering Information, Identifying Alternatives, Assessing Opportunities and Choosing the Best Option, Taking Action, Assessing Activities, Mapping Value Streams);
9. Process management and change management; Implementation of the organized communication process; Project change and management (project methodology during project management: methods and processes); Optimization of the new process; Supply chain analysis using value stream mapping.

### Teaching methods

Didactic methods

In lectures:

1. Information lecture
2. Conversational lecture



In the field of self-employment:

1. Working with a book

In the scope of exercises:

1. The exercise method? case method
2. Demonstration method
3. Guided text method
4. Simulation method
5. Discussion in the form of a round table

### Bibliography

Basic

1. Waters D., Zarządzanie operacyjne, PWN, Warszawa, 2007
2. Bardi E.J., Coyle J.J., Langley C.J., Zarządzanie logistyczne, PWE, Warszawa, 2002
3. Grzybowska K., Łopatowska J., Zarządzanie operacyjne w łańcuchu dostaw, L. Zawadzka, G. Zieliński (red.), Zarządzanie operacyjne w teorii i praktyce, Systemy, procesy, narzędzia, Wydawnictwo Politechniki Gdańskiej, Gdańsk, 2013
4. Jasiński Z. (red.), Podstawy zarządzania operacyjnego, Wolters Kluwer, Gliwice, 2010
5. Szczepańska K., Bugdol M. (red.), Podstawy zarządzania procesami, Difin, Warszawa, 2016

Additional

1. Kiperska-Moroń, Krzyżaniak S. (red.), Logistyka, Biblioteka Logistyka, Poznań, 2009
2. Bitkowska A., Zarządzanie procesowe we współczesnych organizacjach, Difin, Warszawa, 2013

### Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,0
Classes requiring direct contact with the teacher	30	1,5
Student's own work (literature studies, preparation for tutorials, preparation for tests, preparing to pass exercises) <sup>1</sup>	70	2,5

<sup>1</sup> delete or add other activities as appropriate