



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Distribution Logistics

### Course

Field of study

Logistics

Area of study (specialization)

Level of study

First-cycle studies

Form of study

part-time

Year/Semester

2/4

Profile of study

general academic

Course offered in

Polish

Requirements

compulsory

### Number of hours

Lecture

8

Laboratory classes

Tutorials

Projects/seminars

10

Other (e.g. online)

### Number of credit points

2

### Lecturers

Responsible for the course/lecturer:

Ph.D., D.Sc., Eng., Piotr Cyplik, Universty  
Professor

Responsible for the course/lecturer:

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Faculty of Engineering Management

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### Prerequisites

Student knows the basics of logistics. Student can use basic logistic measures in practise.

### Course objective

The aim of the course is to introduce students with the organization of distribution systems - their diversity, structure and functioning. Students will learn a number of useful concepts and tools used most often in the field of distribution logistics.

### Course-related learning outcomes

Knowledge

1. Student knows the basic relationships in the distribution and supply chain logistics [P6S\_WG\_05]



2. Student is able to recognize the basic phenomena characteristic of distribution and supply chain logistics [P6S\_WG\_08]
3. Student is able to explain in detail the characteristic concepts for distribution and supply chain logistics [P6S\_WG\_08]
4. Student is able to formulate the basic relationships in the distribution and supply chain logistics [P6S\_WK\_04]
5. Student is able to identify contemporary trends in distribution and supply chain logistics [P6S\_WK\_05]
6. Student is able to characterize the best practices in distribution and supply chain logistics [P6S\_WK\_06]

#### Skills

1. Student is able to search based on the literature on the subject and other sources and present information on the problem of designing the distribution system in an orderly manner [P6S\_UW\_01]
2. Student is able to present, using properly selected means, the designed distribution system [P6S\_UK\_01]
3. Student is able to prepare and present an oral presentation on specific issues related to the organization of the distribution system [P6S\_UK\_02]
4. Student is able to independently develop a given distribution system project [P6S\_UW\_07]
5. Student is able to formulate, using analytical and simulation methods, the task of designing a distribution system [P6S\_UW\_03]
6. Student can economically assess the selected distribution system [P6S\_UW\_03]
7. Student is able to make a critical analysis of the designed or existing distribution system [P6S\_UW\_06]
8. Student is able to design a distribution system using appropriate methods and techniques [P6S\_UU\_01]

#### Social competences

1. Student is aware of the need to learn lifelong solutions in distribution logistics [P6S\_KK\_02]
2. Student is willing to cooperate and work in a group within the development of the distribution system project [P6S\_KO\_02] [P6S\_KR\_02]
3. Student is able to correctly identify and resolve dilemmas related to the profession of logistics working in the sphere of distribution [P6S\_KR\_01]

#### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture: final exam written answer to the questions asked.



Project: on the basis of the project and its final defense.

### Programme content

Lecture: Essence, tasks and functions of distribution logistics. Distribution channel theory. Forms of distribution. Types and functions of intermediaries in distribution channels. Shaping of assortment in the point of view of distribution logistics. Students are also familiar with selected issues important for distribution logistics: center of gravity method, centralization and decentralization of stocks, distribution requirement planning, analysis of distribution center functioning.

Project: Application of a spreadsheet to build a model of a distribution network, including: center of gravity method for the location of distribution centers, the square root method in inventory management in the distribution network, route planning under specific limiting conditions, optimization of distribution logistics costs, multi-channel sales in the distribution network.

### Teaching methods

Lecture: information lecture, conversatory lecture, problem lecture.

Project: classic problematic method, case study method.

### Bibliography

#### Basic

1. Cyplik P., Hadaś Ł., Fertsch M., Zarządzanie dystrybucją, Wydawnictwo Politechniki Poznańskiej, Poznań 2011.
2. Bendkowski J., Pietrucha-Pacut M., Podstawy logistyki w dystrybucji, Wydawnictwo Politechniki Śląskiej, Gliwice 2003.
3. Domański R., Hadaś Ł., Kształtowanie systemu logistycznej obsługi klienta w warunkach realizacji strategii omnichannel, *Gospodarka Materiałowa i Logistyka*, 07/2017, [https://www.pwe.com.pl/files/1402371585/file/gmil\\_7\\_2017\\_nr\\_int.pdf](https://www.pwe.com.pl/files/1402371585/file/gmil_7_2017_nr_int.pdf)

#### Additional

1. Śliwczyński B., Koliński A., Organizacja i monitorowanie procesów dystrybucji, Instytut Logistyki i Magazynowania, Poznań 2014.
2. Cyplik P., Głowacka D., Fertsch M., Logistyka przedsiębiorstw dystrybucyjnych, Wyższa Szkoła Logistyki, Poznań 2008.
3. Rutkowski K. (red.), Logistyka dystrybucji, Wydawnictwo Difin, Warszawa 2001.
4. Domański R., How to measure omnichannel? Marketing indicator-based approach – Theory fundamentals, *LogForum* 17 (3) 2021, [https://www.logforum.net/pdf/17\\_3\\_5\\_21.pdf](https://www.logforum.net/pdf/17_3_5_21.pdf)



### Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,0
Classes requiring direct contact with the teacher	18	1,0
Student's own work (literature studies, preparation for exam, project preparation) <sup>1</sup>	32	1,0

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