COURSE DESCRIPTION CARD - SYLLABUS

Course name
Distribution Logistics [N1Log2>LD]

Course

Field of study
Logistics

Year/Semester
2/4

Area of study (specialization)
–

Profile of study
general academic

Level of study
first-cycle

Course offered in
Polish

Form of study
part-time

Requirements
compulsory

Number of hours

Lecture
8

Laboratory classes
0

Other
0

Tutorials
0

Projects/seminars
10

Number of credit points

2,00

Coordinators

dr hab. inż. Piotr Cyplik prof. PP
piotr.cyplik@put.poznan.pl

Lecturers

Prerequisites

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

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 or oral answer to the questions asked.
Project: on the basis of the project and its final defense.

Programme content

The essence, tasks and functions of distribution logistics. Theory of distribution channels. Forms of distribution. Methods of shaping the assortment in distribution channels. Methods of allocating points in the distribution network. Planning of material requirements in the distribution network. The role and importance of distribution centers.

Course topics

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 klieneta 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

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. Grzybowska K., Ragin-Skorecka K., Siemieniak K., Cyplik P., Adamczak M., Jankowski-Guzy J., Toboła-Walaszczyk A., Advanced using of spreadsheet to analyze logistics data - theoretical introduction, Wyższa Szkoła Logistyki, Poznań, 2025.
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

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	18	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	32	1,00