## POZNAN UNIVERSITY OF TECHNOLOGY



#### EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

## **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

Logistic suport analysis

Course

Field of study Year/Semester

Logistics 1/1

Area of study (specialization) Profile of study

Supply chain logistics general academic
Level of study Course offered in

Second-cycle studies polish

Form of study Requirements

full-time elective

Number of hours

Lecture Laboratory classes Other (e.g. online)

30

Tutorials Projects/seminars

30

**Number of credit points** 

5

#### Lecturers

Responsible for the course/lecturer:

Responsible for the course/lecturer:

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#### **Prerequisites**

The student starting this subject should have a basic knowledge of logistics and logistics engineering. He should also be able to obtain information from specified sources and be willing to cooperate as part of a team.

#### **Course objective**

Mastering the student's knowledge, skills and social competences related to logistic suport analysis.

## **Course-related learning outcomes**

Knowledge

- 1. dependencies in the given area and their relations with logistics [P7S WG 01]
- 2. issues in the field of production engineering and its connections with the field of logistics [P7S\_WG\_02]
- 3. extended concepts for logistics and its detailed problems and supply chain management [P7S\_WG\_05]

Skills

- 1. collect on the basis of the literature of the subject and other sources (in Polish and English) and in an orderly manner, provide information on the problem within the framework of logistics and its specific issues and supply chain management [P7S\_UW\_01]
- 2. communicate using appropriately selected resources in a professional environment and in other environments as part of logistics and its specific issues as well as supply chain management [P7S\_UW\_02]
- 3. assess the suitability and the possibility of using new achievements (techniques and technologies) in the field of logistics and functionally related areas [P7S\_UW\_06]

#### Social competences

- 1. identify changes in requirements, standards, regulations, technical progress and the reality of the labor market, and on their basis determine the need to supplement own and other knowledge [P7S\_UU\_01]
- 2. correct identification and resolution of dilemmas related to the profession of logistic manager, with respect for professional ethics and respect for diversity of views and cultures [P7S\_KK\_02]
- 3. responsibility for own work and readiness to comply with the rules of working in a team and taking responsibility for the tasks carried out jointly [P7S\_KR\_01]

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

Learning outcomes presented above are verified as follows: assessment based on a team-developed project,

grade based on written credit (exam)

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#### **Programme content**

Lecture: Planning of logistic support. Organizing the supply of materials needed to implement logistics support. Providing control and support equipment. Packaging, storage and transport of materials necessary for the implementation of logistics support. Provision and training of personnel providing logistic support. Creating and ensuring the availability of infrastructure necessary for the implementation of logistics support. Gathering and ensuring the availability of data necessary for the implementation of logistics support. Providing IT support for the implementation of logistics support.

Logistics support analysis: Defining the problem, identifying available alternatives, choosing alternative evaluation criteria, selecting methods and techniques for analyzing alternatives, collecting and using data, analyzing results, analyzing sensitivity, analyzing risk and uncertainty

Project: In design classes, students use logistic support analysis in conditions specified by the teacher.

#### **Teaching methods**

- 1. Lecture: multimedia presentation, illustrated with examples on the board.
- 2. Projects: multimedia presentation illustrated with examples given on the board and performance of tasks given by the teacher.

#### **Bibliography**

#### Basic

- 1. Fertsch M., Elementy inżynierii logistycznej ( rozdz. 1 i 2), Wydawnictwo Instytutu Logistyki i Magazynowania, Poznań, 2017
- 2. Blanchard B., Logistics engineering and management, Pearson Education International, Upper Saddle River, New Yersey
- 3. Don Taylor G., Introduction to logistics engineering, CRC Pres, Taylor & Francis Group, London, New York, 2009
- 4. Fertsch M., (2003), Miejsce logistyki we współczesnym zarządzaniu produkcją, [w:] Fertsch M., Logistyka produkcji, Instytut Logistyki i Magazynowania, Poznań 2003, (ISBN 83-87344-36-2)

## Additional

- 1. Fertsch M., (2008), Rekonfigurowalne systemy logistyczne nowy obszar badań i zastosowań praktycznych, [w:] Foltynowicz Z., Jasiczak J., Szyszka G. (red.), Towaroznawstwo opakowania logistyka, Wydawnictwo Akademii Ekonomicznej, Poznań, 2008
- 2. Pawlewski P., Fertsch M., (2010), Modeling and Simulation Method to Find and Eliminate Bottlenecks in Production Logistics Systems, Proceedings of The 2010 Winter Simulation Conference; B. Johansson, S. Jain, J. Montoya-Torres, J. Hugan, and E. Yücesan, (eds).





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# Breakdown of average student's workload

	Hours	ECTS
Total workload	125	5,0
Classes requiring direct contact with the teacher	60	2,5
Student's own work (literature studies, preparation for	65	2,5
tests/exam, project preparation) <sup>1</sup>		

4

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