



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Logistic systems

### Course

Field of study

Management and Production Engineering

Area of study (specialization)

Level of study

Second-cycle studies

Form of study

full-time

Year/Semester

1/2

Profile of study

general academic

Course offered in

Polish

Requirements

compulsory

### Number of hours

Lecture

15

Laboratory classes

15

Other (e.g. online)

Tutorials

Projects/seminars

### Number of credit points

2

### Lecturers

Responsible for the course/lecturer:

PhD. Eng. Krzysztof Grzeskowiak

Responsible for the course/lecturer:

email: [krzysztof.grzeskowiak@put.poznan.pl](mailto:krzysztof.grzeskowiak@put.poznan.pl)

tel. + 48 61 6652403

Faculty of Mechanical Engineering

3 Piotrowo street, 60-965 Poznan

### Prerequisites

Basic information in the field of enterprise logistics; skills in identifying logistics in the area of an enterprise, logical thinking, using information obtained from literature and the Internet; understanding the need to learn and acquire new knowledge.

### Course objective

Getting to know logistic subsystems from the point of view of material flow phases and functions fulfilled by logistics.

### Course-related learning outcomes

Knowledge

1. The student is able to characterize the logistic subsystems due to the phases of material flow



2. The student is able to characterize the logistic subsystems due to the functions fulfilled by logistics
3. The student is able to characterize selected elements of the logistics infrastructure

#### Skills

1. The student is able to identify the impact of logistic activities on the functioning of enterprises
2. The student is able to assess the functioning of logistics in a selected enterprise
3. The student is able to select elements of the logistics infrastructure to the assumed needs
4. Student can make analyzes of logistic support company decisions

#### Social competences

1. The student is able to work in a group
2. The student is aware of the role of logistics in today's economy and society
3. The student understands the need for lifelong learning; can inspire and organize the learning process of other people

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

Learning outcomes presented above are verified as follows:

Lecture:

Written test carried (in case of a credit min. 50.1% correct). Up to 50.0% - unsatisfactory (2.0) = F, from 50.1% to 60.0% - Satisfactory (3.0) = E, from 60.1% to 70.0% - Satisfactory plus (3,5) = D, from 70.1 to 80 - Good (4.0) = C, from 80.1% to 90.0% - Good plus (4,5) = B, from 90.1% - Very good (5,0) = A.

Tutorials:

Class attendance and written test (in case of a credit min. 50.1% correct). Up to 50.0% - unsatisfactory (2.0) = F, from 50.1% to 60.0% - Satisfactory (3.0) = E, from 60.1% to 70.0% - Satisfactory plus (3,5) = D, from 70.1 to 80 - Good (4.0) = C, from 80.1% to 90.0% - Good plus (4,5) = B, from 90.1% - Very good (5,0) = A.

#### Programme content

Lecture:

Logistic system and its subsystems. Classification of logistics systems in terms of material flow phases. Characteristics of the subsystems of supply logistics, production and distribution. Classification of logistics systems according to their functions. Characteristics of order handling, inventory management, warehouse, packaging and transportation. Identification of logistics problems with indicators. Logistics infrastructure. Warehouse buildings and warehouse equipment. Means of internal transport. Information in logistic systems. IT solutions supporting the acquisition and exchange of data and information (goods marking systems - bar codes, RFID systems).



**Tutorials:**

Performing calculations and analyzes presenting selected aspects of logistics activities supporting decision-making regarding the enterprise (order handling, inventory management, warehouse, packaging, transport).

**Teaching methods**

Lecture with the use of multimedia presentations. Tutorials: problem solving, practical exercises, discussion, workshops, integration games, case studies.

**Bibliography**

Basic

1. Pfohl H-Ch., Systemy logistyczne. Podstawy organizacji i zarządzania, Wyd. Instytut Logistyki i Magazynowania, Poznań, 2001
2. Zarządzanie logistyczne, Coyle J. i inni, Wyd. Polskie Wydawnictwo Ekonomiczne, Warszawa, 2002
3. Twaróg J., Mierniki i wskaźniki logistyczne, Wyd. Instytut Logistyki i Magazynowania, Poznań, 2003

Additional

1. Skowronek C., Sarjusz-Wolski Z., Logistyka w przedsiębiorstwie, PWE, Warszawa, 1999
2. Sarjusz-Wolski Z., Skowronek C., Logistyka - poradnik praktyczny, CIM, Warszawa, 2000
3. Fertsch M., Logistyka produkcji, Wyd. Instytut Logistyki i Magazynowania, Poznań, 2003
4. Krzyżaniak S., Podstawy zarządzania zapasami w przykładach, Wyd. Instytut Logistyki i Magazynowania, Poznań, 2002

**Breakdown of average student's workload**

	Hours	ECTS
Total workload	50	2,0
Classes requiring direct contact with the teacher	30	1,0
Student's own work (literature studies, preparation for laboratory classes, preparation for tests, preparation of reports from laboratories) <sup>1</sup>	20	1,0

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