COURSE DESCRIPTION CARD - SYLLABUS

Course name
Logistic suport analysis [S2Log2-SPL>AWL]

Course

Field of study
Logistics

Year/Semester
2/3

Area of study (specialization)
Production-logistics Systems

Profile of study
general academic

Level of study
second-cycle

Course offered in
Polish

Form of study
full-time

Requirements
elective

Number of hours

Lecture
15

Laboratory classes
0

Other
0

Tutorials
0

Projects/seminars
30

Number of credit points

3,00

Coordinators

prof. dr hab. inż. Marek Fertsch
marek.fertsch@put.poznan.pl

Lecturers

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. The student knows the relationships governing in a given area related to the applications of logistic support analysis (P7S_WG_01)
2. The student knows issues in the field of production engineering and its connections related to the applications of logistic support analysis (P7S_WG_02)
3. The student knows extended concepts for areas related to the applications of logistic support analysis [P7S_WG_05]

Skills:
1. The student is able to collect, based on the literature on the subject and other sources, and present in an orderly manner information regarding a problem that falls within the framework of the application of logistic support analysis.
[P7S_UW_01]
2. The student is able to communicate using appropriately selected means in a professional environment and in other environments related to the applications of logistic support analysis
[P7S_UW_02]
3. The student is able to assess the usefulness and possibility of using new achievements (techniques and technologies) in the scope related to the applications of logistic support analysis and functionally related areas [P7S_UW_06]
4. The student is able to identify changes in requirements, standards, regulations, technical progress and the reality of the labor market, and on their basis determine the needs to supplement his own and others' knowledge within the framework of logistic support analysis applications [P7S_UU_01]

Social competences:
1. The student notices cause-and-effect relationships in the implementation of set goals and gradates the importance of alternative or competing tasks related to the application of logistic support analysis
[P7S_KK_01]
2. The student correctly identifies and resolves dilemmas related to the profession of logistics manager, observing the principles of professional ethics and respecting the diversity of views and cultures
[P7S_KK_02]
3. The student is aware of the responsibility for his/her own work and is ready to obey the principles of teamwork and be responsible for jointly performed tasks [P7S_KR_01]

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture: grade based on written credit.
Project: assessment based on a team-developed project.

Programme content

Knowledge of issues related to logistic support.
Knowledge of issues in the field of logistic support analysis.

Course topics

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: Students use logistic support analysis in conditions specified by the teacher.

Teaching methods

Lecture: an informative lecture supported by a multimedia presentation, illustrated with examples given on the blackboard.
Project: project method supported by a multimedia presentation illustrated with examples given on the board and the implementation 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, 2013.
3. Don Taylor G., Introduction to logistics engineering, CRC Pres, Taylor & Francis Group, London, New York, 2009.
4. Fertsch M., Miejsce logistyki we współczesnym zarządzaniu produkcją [w:] Fertsch M., Logistyka produkcji, Instytut Logistyki i Magazynowania, Poznań, 2003.

Additional:
1. Fertsch M., 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., Modeling and Simulation Method to Find and Eliminate Bottlenecks in Production Logistics Systems, Proceedings of The 2010 Winter Simulation Conference, 2010.

Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,00
Classes requiring direct contact with the teacher	45	2,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	30	1,00