STUDY MODULE DESCRIPTION FORM

Name of the module/subject	Code
(-)	**1011105311011117659**

Field of study	Profile of study (general academic, practical)	Year /Semester
Logistics - Part-time studies - Second-cycle	**general academic**	**1 / 1**

Elective path/specialty	Subject offered in:	Course (compulsory, elective)
Chain of Delivery Logistics	**Polish**	**elective**

Cycle of study:	Form of study (full-time,part-time)
Second-cycle studies	**part-time**

No. of hours				No. of credits
Lecture: **16** Classes: **-** Laboratory: **-** Project/seminars: **16**				**5**

Status of the course in the study program (Basic, major, other)	(university-wide, from another field)
other	**university-wide**

Education areas and fields of science and art	ECTS distribution (number and %**)**
technical sciences	**5 100%**
Technical sciences	**5 100%**

Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	Student has general knowledge in logistics
2	**Skills**	Student has general skills in logistics
3	**Social competencies**	Student has social skills in logistics

Assumptions and objectives of the course:

Providing knolwedge, skills and social competences connected woth analysis of logistics support

Study outcomes and reference to the educational results for a field of study

Knowledge:

1. Student is able to identify interdependencies and relations within area of Logistics suport and their connection to Logistics - [[K2A_W02]]

2. Student knows basic relations between technical and economic sphere typical for Logistics support - [[K2A_W04]]

3. Student knows basic terms and definitions typical for Logistics support - [[K2A_W09]]

4. Student is familiar with process mapping idea and generally process approach - [[K2A_W10]]

5. Student is familiar with IT systems applicable in Logistics support area   - [[K2A_W12]]

6. Student is able to identify and explain methods, tools and means applicable in Logistics support area   - [[K2A_W13]]

Skills:

Faculty of Engineering Management

1. Student is able to communicate with proper means in professional environment and other environments connected with Logistics support area   - [[K2A_U02]]

2. Student is able to develop and present in Polish or in foreign language analysis of a given problem within Logistics support area - [[K2A_U04]]

3. Student is able to benefit from self-learning   - [[K2A_U05]]

4. Student is able to define and solve problem integrating interdisciplinary knowledge from the disciplines within logistics - [[K2A_U10]]

5. Student is able to assess potential of new solutions (technics and technologies) within logistics and connected areas   - [[K2A_U12]]

6. Student is able to identify areas for improvement within Logistics system   - [[K2A_U16]]

Social competencies:

1. Student is aware of responsibility for own work and ready to obey team work principles, including sharing responsibility for group tasks - [[K2A_K03]]

2. Student is able to identify interdependencies and cause-effect relations in striving for goals and prioritize tasks - [[K2A_K04]]

Assessment methods of study outcomes

Forming assessment

a) project ? discussion on solution, students developed in their project, b) answering questions discussed dusring lecture and refering to issues presented

Final assessment

project a) public presentation of project outcomes and discussion on solutions developed b) quality of project developed

lecture: presentation of analysis of a problem defined by the coordinator, answering questions concerning subject content

Course description

Logistics support planning. Organization of material necessary for realization of Logistics support. Providing equipment to support and control processes. Packing, storing, transporting material necessary for logistics support.

Issues concerning training of logistics support staff, providing infrastructure necessary for logistics support, collecting and distributing data necessary for logistics support. Providing IT software necessary for logistics support.

Analysis of logistics support, definition of the problem, identification of available alternatives, selection of assessment criteria, selection of methods and technics of alternatives analysis, collecting and using data, analysis of results, analysis of sensitivity, risk analysis.

Teaching methods: conventional specialist lecture, team project, work with literature

Basic bibliography:

1. Blanchard B., Logistics engineering and management, Pearson Education International, Upper Saddle River, New Yersey

2. Blanchard B., Logistics engineering and management, Pearson Education International, Upper Saddle River, New Yersey

3. Fertsch M., Elementy inżynierii logistycznej (rozdz. 1 i2), Wydawnictwo Instytutu Logistyki i Magazynowania, Poznań, 2017

4. Don Taylor G., Introduction to logistics engineering, CRC Pres, Taylor & Francis Group, London, New York, 2009

5. 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 bibliography:

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).

Result of average student's workload

Activity	Time (working hours)
1. lectures	30
2. project	30
3. home work	15
4. work in groups	15
5. consultations	35

Student's workload

http://www.put.poznan.pl/

Source of workload	hours	ECTS
Total workload	125	5
Contact hours	57	3
Practical activities	46	2