



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Standardization and quality management in logistics [S1Log2>NiZJwL]

Course

Field of study

Logistics

Year/Semester

3/6

Area of study (specialization)

–

Profile of study

general academic

Level of study

first-cycle

Course offered in

Polish

Form of study

full-time

Requirements

compulsory

Number of hours

Lecture

30

Laboratory classes

0

Other

0

Tutorials

15

Projects/seminars

15

Number of credit points

5,00

Coordinators

prof. dr hab. inż. Józef Fraś
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Lecturers

Prerequisites

The student starting this subject should have general knowledge in the field of standardization, logistics basics and business management. He should also be able to obtain information from the indicated sources and be ready to cooperate as part of a team.

Course objective

Providing students with basic knowledge of standardization and quality management in logistics necessary for the correct design and implementation of quality systems in logistics and developing students' skills to solve problems in the field of standardization and management of systems.

Course-related learning outcomes

Knowledge:

1. Student has a basic knowledge of quality standardization in relation to logistics products and processes [P6S_WG_05]
2. Student has basic knowledge of quality engineering in relation to logistics products and processes [P6S_WG_07]
3. Student has knowledge of the principles of design and implementation of quality systems in the

enterprise [P6S_WK_05]

4. Student has knowledge of modern methods, techniques and tools for management and quality improvement in logistics [P6S_WK_06]

Skills:

1. Student has the ability to design and build a quality management system and its implementation in the enterprise, taking into account the areas of logistics [P6S_UW_01]

2. Student is able to put into practice management and quality improvement instruments in logistics [P6S_UK_01]

Social competences:

1. Student understands that knowledge and skills in the field of standardization and quality management are depreciating very quickly and is aware of lifelong learning [P6S_KO_02]

2. Student is willing to cooperate in a team [P6S_KR_02]

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture: Knowledge acquired during the lecture is assessed by a 60-minute test during the exam session. The test consists of 20 multiple-choice questions.

Total points: 100. Passing threshold: 50% of the points.

The test questions, based on which the test was developed, will be sent to students via email using the university's email system.

Exercises and Project: Skills acquired during the exercises and project activities are assessed by a final test consisting of 5 tasks, each scored differently depending on their difficulty, and based on the project developed.

Total points: 100. Passing threshold: 50% of the points.

Programme content

The program covers standardization and quality standards as well as quality management systems in production and service processes, including the areas of logistics.

Course topics

Lecture: Standardization in the field of quality. The process of creating and types of standards. Legal bases for standardization. The concept of quality and quality management. Quality management concepts. Shaping quality over the product's life cycle. Conformity assessment system. European directives and harmonized standards. Principles of quality management. Management system standards (with particular emphasis on the logistics aspect). Quality management system and its elements. Quality in customer service. Monitoring and measuring the quality of meeting customer requirements in logistics processes. Quality and quality management in Industry 4.0 and 5.0.

Selected methods and tools for quality management and improving the quality of logistics processes.

Exercises: Standardization in logistics. Design and implementation of a quality management system according to ISO 9001: 2015. Quality system documentation. Processes in logistics - qualitative approach. Important instruments for managing and improving the quality system in a logistics company.

Project: Students design a quality management system according to ISO 9001: 2015 for a company, taking into account the methods and tools of management and improvement specified by the teacher.

Teaching methods

Lecture: multimedia presentation illustrated with examples provided on the board. Thematic videos from YouTube.

Auditory exercises: multimedia presentation illustrated with examples provided on the board and completion of tasks assigned by the teacher.

Project: team-based project implementation.

Bibliography

Basic:

1. Fraś J., Normalizacja i zarządzanie jakością w logistyce, Wydawnictwo PP, Poznań 2015.
2. Matuszak-Flejszman A. Zarządzanie jakością. Wydawnictwo Naukowe Uniwersytetu Ekonomicznego w Poznaniu, Poznań 2025.
3. Gołaś H., Mazur A., Zarządzanie jakością, Wydawnictwo PP, Poznań 2011.
4. Hamrol A., Zarządzanie jakością z przykładami, Wydawnictwo Naukowe PWN, Warszawa 2017.
5. Blikle A.; Doktryna jakości. https://moznainaczej.com.pl/Download/DoktrynaJakosci/DoktrynaJako%C5%9Bci_wydanie_II.pdf
6. Quality Management, Value Creation, and the Digital Economy
red. Joanna Rosak-Szyrocka, Justyna Żywiłek, Muhammad Shahbaz. Publisher: Routledge Routledge / Taylor & Francis. London 2024.

Additional:

1. Fraś J., Kompleksowe zarządzanie jakością w logistyce, Wydawnictwo Naukowe Instytutu Technologii Eksploatacji w Radomiu, Radom 2013.
2. Zimon D.: Zarządzanie jakością w logistyce. Wydawnictwo CeDeWu, Warszawa 2013.
3. Detyna B.: Zarządzanie jakością w Logistyce. Metody i narzędzia wspomagające. Przykłady i zadania. Wydawnictwo PWSZ im. AL. Silesiusa w Wałbrzychu, Wałbrzych 2011.
4. Łunarski J.: Normalizacja i standaryzacja. Wydawnictwo Naukowe Politechniki Rzeszowskiej, Rzeszów 2014.
5. Evans J.R.: Managing for Quality and Performance Excellence. Boston (Massachusetts, USA): Cengage Learning, 2024

Breakdown of average student's workload

	Hours	ECTS
Total workload	125	5,00
Classes requiring direct contact with the teacher	62	2,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	63	2,50