



## 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 (e.g. online)  
0

Tutorials  
15

Projects/seminars  
15

### Number of credit points

5,00

### Coordinators

prof. dr hab. inż. Józef Fraś  
jozef.fras@put.poznan.pl

### 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 as part of the lecture is verified by one 90-minute colloquium carried out during the 15th lecture. Colloquium consists of 5 open questions and 10 test questions, variously scored. Total points to get 100. Passing threshold: 50% of points. Final issues on the basis of which questions are prepared will be sent to students by e-mail using the university e-mail system.

Exercises and project: Skills acquired as part of the tutorials and projects are verified on the basis of the final test, consisting of 5 tasks with different points depending on their level of difficulty and on the basis of the developed project. Total points to get 100 Final threshold: 50% of points.

### Programme content

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. 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 on the board.

Auditorium exercises : multimedia presentation illustrated with examples given on the board and performing tasks given by the teacher.

Project: team implementation of a design exercise.

### Bibliography

Basic:

1. Fraś J., Normalizacja i zarządzanie jakością w logistyce, Wydawnictwo PP, Poznań 2015.

2. Hamrol A., Zarządzanie jakością z przykładami, Wydawnictwo Naukowe PWN, Warszawa 2008.

3. Ładoński W., Szoltysek K. (red.), Zarządzanie jakością. Część 2. Ochrona jakości wyrobów w łańcuchu logistycznym, Wydawnictwo AE, Wrocław 2007.

4. Gołaś H., Mazur A., Zarządzanie jakością, Wydawnictwo PP, Poznań 2011.

5. Karaszewski R., Skrzypczyńska K., Zarządzanie jakością, Wydawnictwo TNOiK, Toruń, 2013.

Additional:

1. Fraś J., Kompleksowe zarządzanie jakością w logistyce, Wydawnictwo Naukowe Instytutu Technologii

Eksploatacji w Radomiu, Radom 2013.

2. Łunarski J., Zarządzanie jakością w logistyce, Oficyna Wydawnicza Politechniki Rzeszowskiej, Rzeszów 2012.

3. Coyle J.J., Bardi E.J., Langley Jr. C.J., Zarządzanie logistyczne, PWE, Warszawa 2010.

### 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