



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Commodity science [S1Log2>TOW]

### Course

Field of study

Logistics

Year/Semester

2/4

Area of study (specialization)

–

Profile of study

general academic

Level of study

first-cycle

Course offered in

Polish

Form of study

full-time

Requirements

elective

### Number of hours

Lecture

15

Laboratory classes

0

Other (e.g. online)

0

Tutorials

30

Projects/seminars

0

### Number of credit points

4,00

### Coordinators

dr inż. Jacek Lewandowicz

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### Lecturers

### Prerequisites

The student starting this course should have a basic knowledge of chemistry, physics and mathematics after high school basic course. In addition, participants should also understand the relationships between different areas of life sciences and show readiness to deepen their knowledge.

### Course objective

The main aim of the course is to present the place of commodity(quality) science among life and economic sciences. The additional goal concerns development of understanding of the importance of logistics in quality assurance of products.

### Course-related learning outcomes

Knowledge:

1. Student knows the basic topics in the field of chemical technology, materials science, commodity science, mechanic of materials and microbiology as well as their importance for industrial and logistic processes in aspect of quality design and assurance[P6S\_WG\_03]
2. Student knows the basic aspects of mechanics, construction and operation of machines related to commodity science [P6S\_WG\_02]

#### Skills:

1. 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 need to supplement knowledge in the field of commodity science [P6S\_UU\_01]
3. Student is able to choose the right tools and methods to solve the problems related to commodity science, and to use them effectively [P6S\_UO\_02]

#### Social competences:

1. Student is aware of initiating activities related to the formulation and transfer of information and cooperation in society related to the field of commodity science [P6S\_KO\_02]
2. Student is aware of the need to cooperate and can create a work group to solve problems within the framework of commodity science and quality management [P6S\_KR\_02]
3. Student is aware of the importance of knowledge in the field of commodity science in solving cognitive and practical problems [P6S\_KK\_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 two 30-minute colloquia carried out during the 7th and 14th lectures. The colloquia consist of 10 multiple-choice test questions that are scored equally. The passing threshold is 50%. Topics are made available to students on the e-Learning platform and during the lectures.

Tutorial: Verification of the learning outcomes as part of tutorials is based on reports submitted upon completed tasks, which are performed by participants on a regular basis. The passing threshold is 50%.

### Programme content

Classification of goods, conditions influencing quality of goods, research and assessment of the quality of goods, quality design of food products, quality design of industrial products and packaging.

### Course topics

Lecture: Commodity science as a discipline of science, classification of goods, conditions influencing quality of goods, research and assessment of the quality of goods, quality design of food products, quality design of industrial products, packaging quality, packaging functions, product ecology.

Tutorial: Quality design of food products, product marketing, quality management techniques, food safety, packaging quality, labeling of goods.

### Teaching methods

Lecture: informative lecture with conversational elements, multimedia presentation and discussion.

Tutorials: subject texts and workshop method, multimedia presentation, case study, tasks given by the teacher and discussion.

### Bibliography

#### Basic:

1. Jałowiec T., Towaroznawstwo w zarządzaniu procesami logistycznymi, Wyższa Szkoła Oficerska Wojsk Lądowych im. Generała Tadeusza Kościuszki, Wrocław, 2015.
2. Jałowiec T., Towaroznawstwo dla logistyki, Difin, Warszawa, 2011.
3. Łuczak J., Matuszak-Flejszman A., Metody i techniki zarządzania jakością: kompendium wiedzy, Quality Progress, Poznań, 2007.

#### Additional:

1. Series of monographs under collaborative title "Current Trends In Commodity/Quality Science" issued by Wydział Towaroznawstwa/Instytut Nauk o Jakości Uniwersytetu Ekonomicznego w Poznaniu (open access).
2. Journal - Towaroznawcze Problemy Jakości (open access).

### Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,00
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)	55	2,00