



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Packaging in logistics [S1Log2>OwL]

### 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

0

Tutorials

30

Projects/seminars

0

### Number of credit points

4,00

### Coordinators

dr inż. Jacek Lewandowicz

### Lecturers

### Prerequisites

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

### Course objective

The main aim of the course is to present the importance of packaging in logistic processes. The additional goal concerns development of understanding of the importance of intelligent and eco-friendly packaging as an element of competitive advantage.

### Course-related learning outcomes

Knowledge:

1. Student knows the basic aspects of mechanics, construction and operation of machines related to packaging [P6S\_WG\_02]
2. Student knows the basic topics in the field of chemical technology, materials science, commodity science and the mechanic of materials as well as their importance for production and processing of packaging [P6S\_WG\_03]

### 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 packaging [P6S\_UU\_01]
2. Student is able to choose the right tools and methods to solve the problems related to packaging, 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 packaging [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 logistics and quality management of packaging [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 through two quizzes administered during lectures and/or oral responses to questions and tests (quizzes via the eKursy platform) during individual classes. Passing threshold: 50% of points.

Tutorial: Learning outcomes achieved during the exercises are assessed based on teamwork and class participation. Passing threshold: 50% of points.

## Programme content

Economic importance of packaging. Packaging functions. Requirements for transport packaging. Design of packaging. Quality science in packaging. Marketing aspect of packaging. Methods for production of intelligent and active packaging. Eco-friendly packaging.

## Course topics

Lecture: The economic importance of packaging. Packaging functions. Requirements for transport packaging. Packaging design guidelines. Packaging marketing. Packaging commodity science. Environmental and processing aspects of packaging. Production techniques for active and intelligent packaging.

Tutorials: The programme of the course covers topics related to: the economic importance of packaging, packaging functions, transport packaging requirements, packaging design guidelines, packaging commodity science, packaging marketing, environmental and processing aspects of packaging, and production techniques for active and intelligent packaging in practical terms.

## Teaching methods

Lecture: informative lecture with multimedia presentation, conversational lecture, problem-based lecture. Tutorials: brainstorming, business stories, case studies, project method.

## Bibliography

### Basic:

1. Cierpiszewski R., Opakowania aktywne i inteligentne, Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu, Poznań, 2016.
2. Żakowska H., Opakowania a środowisko: wymagania, standardy, projektowanie, znakowanie, Wydawnictwo Naukowe PWN, Warszawa, 2017.
3. Jakowski S., Opakowania transportowe - Poradnik, Wydawnictwo Naukowe PWN, Warszawa, 2017.

### Additional:

1. Lisińska-Kuśnierz M., Badanie i ocena jakości materiałów opakowaniowych i opakowań jednostkowym, Wydawnictwo Akademii Ekonomicznej w Krakowie, Kraków, 2005.
2. Ankiel-Homa M., Czaja-Jagielska N., Malinowska P., Opakowania kosmetyków – aspekty towaroznawcze i marketingowe, IBRKiK, Warszawa, 2014.
3. Ratajczyk M., Opakowanie jako narzędzie oddziaływania na nabywców. Zarządzanie opakowaniem w przedsiębiorstwie, Polskie Wydawnictwo Ekonomiczne, Warszawa, 2021.

## 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