

Course name:**PACKING, STORAGE AND TRANSPORT OF FOOD PRODUCTS**

ECTS	2
Course status	optional/facultative
Course final assesement/evaluation of outcomes	exam
Prerequisites	no prerequisites

Main field of study:**field of study name (capital letters)**

Profile of study	academic
The code of studies (education level)	SI / SM (bachelor/master)
Semester of studies	summer and winter
Language of instruction	english

Course offered by:

Name of faculty offering the course	Faculty of Food Technology
Name of department offering the course	Department of Human Nutrition and Dietetics
Course coordinator	Joanna Kapusta-Duch, Ph. D., D. Sc., Eng

Learning outcomes of the course:

Symbol of outcome	Description of learning outcome	Reference to	
		main field of study outcomes	discipline #*
KNOWLEDGE – student knows and/or understands:			
PST2_W1	the basic concepts of novelties knowledge of the packaging, storage and transport of food	TŻ2_W01 TŻ2_W02	R
PST2_W2	the basic and non-standard material of packaging and their role in the food industry	TŻ2_W01 TŻ2_W02	R
SKILLS – student is able to:			
PST2_U1	make the selection of the tests packaging and packaging materials and assess	TŻ2_U03	R
PST2_U2	know basic packaging systems	TŻ2_U03	R
SOCIAL COMPETENCE- student is ready to:			
PST2_K1	be active during the discussion of various issues related to food packaging	TŻ2_K03	R

Teaching contents:

Lectures	15 hours
Situation and changes in the packaging industry	

Topics of the lectures	Labeling and coding of packages
	News in the field of plastic packaging
	Novelties in the field of paper packaging material
	New Products in the field of metal packaging material
	News in the field of glass packaging material
	Biodegradation
	Active and intelligent packaging

Accomplished learning outcomes	PST2_W1; PST2_W2; PST2_K1
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Verification methods, rules and criteria of outcome assessment	Written exam (assessment positive for min. 51% points). The participation of the lecture pass mark in the final evaluation is 60%.
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Classes	15	hours
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Topics of the classes	The evaluation and testing of the physical, mechanical, and chemical properties of various packaging material
	Evaluate the accuracy of labeling
	Testing of promotional packaging features
	Packaging systems

Accomplished learning outcomes	PST2_U1; PST2_U2; PST2_K1
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Verification methods, rules and criteria of outcome assessment	Two tests in the field of classes (assessment positive for min. 51% points). Participation in the final evaluation of the module 40%.
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References:

Basic	1. Emblem A. & Emblem H. (ed.). Packaging technology. Fundamentals, materials and processes. Wyd. PWN. Warszawa 2014.
	2. Sarker D. K. Packaging Technology and Engineering: Pharmaceutical, Medical and Food Applications. John Wiley & Sons Ltd. Hoboken, New Jersey 2020.
Supplementary	Journal of Packaging Technology and Research, Springer
	Packaging Technology and Science journal, John Wiley & Sons Ltd

Structure of learning outcomes:

Discipline: R - Agricultural science - discipline nutrition and food technology	2	ECTS**
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Structure of student activities:

Contact hours	30	hours	1,2	ECTS**
including:	lectures	hours		
	classes and seminars	15	hours	
	consultations	1	hours	
	participation in research	0	hours	
	mandatory traineeships	0	hours	
	participation in examinations	1	hours	
e-learning (lectures)	15	hours	0,6	
student own work	20	hours	0,8	ECTS**

Discipline: R - Agricultural science - discipline nutrition and food technology

* zgodnie kodyfikacją ISCED 0721 (Food Science and Technology - 01.3)

** stated with an accuracy to 0.1 ECTS, where 1 ECTS = 25 - 30 hours of classes