


**KAPITAŁ LUDZKI**  
 NARODOWA STRATEGIA SPÓJNOŚCI

 Projekt współfinansowany przez  
 Unię Europejską w ramach  
 Europejskiego Funduszu  
 Społecznego

**UNIA EUROPEJSKA**  
 EUROPEJSKI  
 FUNDUSZ SPOŁECZNY


<b>Course title</b>		<b>ECTS code</b>	
Protection of the Stored Food		13.3.0512	
<b>Name of unit administrating study</b>			
null			
<b>Studies</b>			
<b>faculty</b>	<b>field of study</b>	<b>type</b>	pierwszego stopnia
Wydział Chemii	Chemia	<b>form</b>	stacjonarne
		<b>specjalty</b>	chemia żywności
		<b>specialization</b>	wszystkie
<b>Teaching staff</b>			
dr hab. Marek Gołębiowski, profesor uczelni			
<b>Forms of classes, the realization and number of hours</b>		<b>ECTS credits</b>	
<b>Forms of classes</b>		1	
Lecture		classes - 15 h	
<b>The realization of activities</b>		tutorial classes – 2 h	
classroom instruction		student's own work – 8 h	
<b>Number of hours</b>		Total: 25 h - 1 ECTS	
Lecture: 15 hours			
<b>The academic cycle</b>			
2024/2025 winter semester			
<b>Type of course</b>		<b>Language of instruction</b>	
obligatory		polish	
<b>Teaching methods</b>		<b>Form and method of assessment and basic criteria for evaluation or examination requirements</b>	
multimedia-based lecture		<b>Final evaluation</b>	
		Graded credit	
		<b>Assessment methods</b>	
		Written test with open questions	
		<b>The basic criteria for evaluation</b>	
		<ul style="list-style-type: none"> <li>• positive evaluation - min. 51% from written exam covering the scope of material realized during lectures</li> <li>• negative evaluation can be improved on the basis of an additional written exam covering the scope of material realized during lectures (at least 51% of possible points)</li> </ul>	
<b>Method of verifying required learning outcomes</b>			
<b>Required courses and introductory requirements</b>			
<b>A. Formal requirements</b>			
Chemistry, Biology			
<b>B. Prerequisites</b>			
Knowledge of basic topics in chemistry and major concepts in biology.			
<b>Aims of education</b>			
<ul style="list-style-type: none"> <li>• Knowledge of the method of preservation and storage of food</li> <li>• Knowledge of environmental factors influencing on stored food</li> <li>• Knowledge of the principles of food storage</li> <li>• Knowledge about the protection of stored food</li> <li>• Knowledge of choosing the right way to store food</li> </ul>			
<b>Course contents</b>			

Methods of preserving and storing of food. Types of food preservation methods. Physical methods of food preservation. Chemical methods of food preservation. Biological methods of food preservation. Preserving food with unconventional methods. Food storage. The influence of environmental factors on stored food. Changes in food during storage. The basic principles of food storage. Protection of stored food against rodents, cockroaches, flies, ants, storage pests, birds and other vertebrates. Packaging, storage and transport of food. Control and evaluation of food quality

### Bibliography of literature

Literature required to pass the course

Ewa Czarniecka-Skubina. Technologia żywności. Wydawnictwo: AB format 2010

Lehari Gabriele. Przechowywanie i konserwowanie żywności. MULTICO 2006

Danuta Kołożyn-Krajewska, Tadeusz Sikora, Mieczysław Skrzypek. Towaroznawstwo, WSiP, Warszawa 1999.

Kumirska J., Gołębiowski M., Paszkiewicz M., Bychowska A. Analiza żywności, Wydawnictwo UG, Gdańsk 2010

A.2. studiowana samodzielnie przez studenta

Ewa Czarniecka-Skubina. Technologia żywności. Wydawnictwo: AB format 2010

Lehari Gabriele. Przechowywanie i konserwowanie żywności. MULTICO 2006

Danuta Kołożyn-Krajewska, Tadeusz Sikora, Mieczysław Skrzypek. Towaroznawstwo, WSiP, Warszawa 1999.

Kumirska J., Gołębiowski M., Paszkiewicz M., Bychowska A. Analiza żywności, Wydawnictwo UG, Gdańsk 2010

Extracurricular readings

Gruda Z., Postolski J.: „Zamrażanie żywności”. Warszawa 1985.

Praca zbiorowa pod redakcją Klepacką M. Analiza żywności, Fundacja Rozwój SGGW, Warszawa 2005.

Ewa Hanna Lada. Podstawy przetwórstwa spożywczego. WSiP, Warszawa 2008

Danuta Kołożyn-Krajewska, Tadeusz Sikora - 2004. Towaroznawstwo żywności. WSiP 2004.

### The learning outcomes (for the field of study and specialization)

#### Knowledge

1. The student knows and describes the basic methods used to protect stored food
2. The student can indicate the main health risks resulting from improper storage of food.
3. The student knows the basic principles of protection of stored food.
4. The student knows what changes are in food during storage
5. Understands the basic topics related to the control and evaluation of food quality.

#### Skills

1. The student demonstrates the ability to evaluate the methods used to protection of stored food
2. The student demonstrates the ability to propose methods used to protection of stored food
3. Student evaluates the methods used to protection of stored food
4. Student formulates opinions about the protection of stored food

#### Social competence

1. The student understands the need to learn
2. The student discusses about the protection of stored food
3. The student explains the negative health effects caused by improper food storage
4. The student promotes the importance of protection of stored food.
5. The student consciously evaluate the conditions of the protection of stored food

### Contact

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