


KAPITAŁ LUDZKI
 NARODOWA STRATEGIA SPÓJNOŚCI

 Projekt współfinansowany przez
 Unię Europejską w ramach
 Europejskiego Funduszu
 Społecznego

UNIA EUROPEJSKA
 EUROPEJSKI
 FUNDUSZ SPOŁECZNY


Course title		ECTS code	
Food Radiochemistry and Radiation Protection		13.3.0848	
Name of unit administrating study			
null			
Studies			
faculty	field of study	type	pierwszego stopnia
Wydział Chemii	Chemia	form	stacjonarne
		specjalty	chemia żywności
		specialization	wszystkie
Teaching staff			
dr hab. Dagmara Strumińska-Parulska, profesor uczelni; mgr Klaudia Block-Łaszewska; dr Grzegorz Olszewski; mgr Aleksandra Moniakowska			
Forms of classes, the realization and number of hours		ECTS credits	
Forms of classes		2	
Laboratory classes, Lecture		classes - 45 h	
The realization of activities		tutorial classes – 2 h	
classroom instruction		student's own work – 3 h	
Number of hours		Total: 50 h - 2 ECTS	
Lecture: 15 hours, Laboratory classes: 30 hours			
The academic cycle			
2024/2025 winter semester			
Type of course		Language of instruction	
obligatory		polish	
Teaching methods		Form and method of assessment and basic criteria for evaluation or examination requirements	
- conducting experiments - multimedia-based lecture		Final evaluation	
		Graded credit	
		Assessment methods	
		- written exam with open questions - written exam (test) - graded course credit based on individual grades obtained during the semester - written exam: 10 open questions and 10 test questions	
		The basic criteria for evaluation	
		Writing exam 1. Evaluation criteria in accordance with the UG Studies Regulations; 2. Positive mark from the written exam: 10 open questions and 10 test questions on the basis of the lecture's program 3. Positive mark from the written test: 10 open questions	
Method of verifying required learning outcomes			
Required courses and introductory requirements			
A. Formal requirements			
none			
B. Prerequisites			
none			
Aims of education			

Acquaint the students with radiochemistry and radiation protection	
Course contents	
<p>A. Lecture Radioactive elements in nature. Ionizing radiation doses. Radiotoxicity and its groups. Sources of radioactive contamination in the natural environment. Human absorption of radionuclides from air, food and water, and assessment of radiation doses. Radiological effects of smoking cigarettes. Impact of catastrophes in the nuclear power plants in Chernobyl and Fukushima on radioactive contamination of food. Radioactivity of building materials. Monitoring of radioactive contamination.</p> <p>B. Laboratory experiments food samples collecting for ^{210}Po, ^{234}U, ^{238}U and $^{239+240}\text{Pu}$ activities determination</p>	
Bibliography of literature	
<p>Literature required to pass the course</p> <p>B. Skwarzec, Radiochemia środowiska i ochrona radiologiczna, Wydawnictwo DJ s.c, Gdańska, 2002 J. Sobkowski i M. Jelińska-Kaźmierczuk, Chemia jądrowa, Wydawnictwo Adamantan, Warszawa, 2006 A.2. studiowana samodzielnie przez studenta</p> <p>B. Skwarzec, Radiochemia środowiska i ochrona radiologiczna, Wydawnictwo DJ s.c, Gdańska, 2002 J. Sobkowski i M. Jelińska-Kaźmierczuk, Chemia jądrowa, Wydawnictwo Adamantan, Warszawa, 2006</p> <p>Extracurricular readings W. Szymański, Chemia jądrowa, PWN, Warszawa 1996</p>	
The learning outcomes (for the field of study and specialization)	Knowledge
	Skills
	Social competence
Contact	
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