


KAPITAŁ LUDZKI
 NARODOWA STRATEGIA SPÓJNOŚCI

 Projekt współfinansowany przez
 Unię Europejską w ramach
 Europejskiego Funduszu
 Społecznego

UNIA EUROPEJSKA
 EUROPEJSKI
 FUNDUSZ SPOŁECZNY


Course title		ECTS code	
Monographic lecture - Introduction into photochemistry		13.3.1029	
Name of unit administrating study			
Faculty of Chemistry			
Studies			
faculty	field of study	type	drugiego stopnia
Wydział Chemii	Biznes chemiczny	form	stacjonarne
		specjalty	wszystkie
		specialization	wszystkie
Teaching staff			
prof. dr hab. Janusz Rak			
Forms of classes, the realization and number of hours		ECTS credits	
Forms of classes		3	
Lecture		classes 30 h	
The realization of activities		tutorial classes 10 h	
classroom instruction		student's own work 35 h.	
Number of hours		TOTAL: 75 h - 3 ECTS	
Lecture: 30 hours			
The academic cycle			
2023/2024 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	
multimedia-based lecture		Final evaluation	
		Graded credit	
		Assessment methods	
		(mid-term / end-term) test	
		The basic criteria for evaluation	
		Passing with no less than 51% of the maximum score. Students who do not reach the required threshold take an oral examination.	
Method of verifying required learning outcomes			
Required courses and introductory requirements			
A. Formal requirements			
none			
B. Prerequisites			
none			
Aims of education			
Aims of education			
Familiarization of students with basic concepts and laws of photochemistry; developing ability to describe photochemical processes and reactions and to judgement the possibility of their use in practice.			
Course contents			
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interactions between electromagnetic radiation and matter, basic terms and photochemistry laws, excited states of molecules, Jablonski diagram, the radiation and radiation-less deactivation processes of the excited state, solvent effects, radiation-less inter-molecular energy transfer, kinetics of photochemical reactions, basic types of photochemical reactions, photochemistry of nucleic acids and proteins, process of vision, photosynthesis,			

equipment and methods in photochemical studies.	
Bibliography of literature	
Bibliography of literature Literature required to pass the course	
S. Paszyc, „Podstawy fotochemii”, PWN, Warszawa, 1981. J. P. Simons, „Fotochemia i spektroskopia”, PWN, Warszawa, 1976. J. A. Barltrop, J. D. Coyle, „Fotochemia. Podstawy”, PWN, Warszawa, 1987 P. Suppan, „Chemia i Światło”, PWN, Warszawa, 1997. B. Extracurricular readings	
K. Pigoń, Z. Ruziewicz, „Chemia Fizyczna. Fizykochemia molekularna”, PWN, Warszawa, 2005	
The learning outcomes (for the field of study and specialization)	Knowledge
	Skills
	Social competence
Contact	
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