



KAPITAŁ LUDZKI
NARODOWA STRATEGIA SPÓJNOŚCI

Projekt współfinansowany przez
Unię Europejską w ramach
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Społecznego

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Course title		ECTS code	
Chemistry in practice		13.3.0462	
Name of unit administrating study			
null			
Studies			
faculty	field of study	type	pierwszego stopnia
Wydział Chemii	Chemia	form	stacjonarne
		specjalty	analityka i diagnostyka chemiczna
		specialization	wszystkie
Teaching staff			
dr hab. Janusz Madaj, profesor uczelni; prof. dr hab. Adam Prahł			
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 – 20 h	
classroom instruction		student's own work – 25 h	
Number of hours		Total: 75 h - 3 ECTS	
Lecture: 30 hours			
The academic cycle			
2024/2025 summer 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	
		Examination	
		Assessment methods	
		- written exam with open questions	
		- written test with open-ended questions, oral exam	
		The basic criteria for evaluation	
		<ul style="list-style-type: none"> • positive assessment of the written exam consisting of 5-10 open questions covering issues mentioned in the course contents of the subject; answers to the questions will require solving tasks related to the saved learning outcomes; the grading scale will be adapted to the rules of the study regulations; • for students who have obtained a written exam from 50 to 30% of correct answers - an oral exam - a positive assessment of the answers to 3 questions ; • the condition to take the exam is to get credits from the auditorium classes 	
		Auditorium classes:	
		<ul style="list-style-type: none"> • presentation of 1-2 presentations prepared on the basis of selected literature material, active participation in the group's work and discussion of the presented problems 	
Method of verifying required learning outcomes			
Required courses and introductory requirements			
A. Formal requirements			
Basic knowledge in the field of general and organic chemistry			
B. Prerequisites			
Basic knowledge in the field of general and organic chemistry			
Aims of education			

<p>familiarize students with the issues mentioned in the lecture's program,</p> <ul style="list-style-type: none"> • acquainting students with the basic economic principles of the functioning of the chemical industry, • developing the skills of critical evaluation and interpretation of the presented news and analysis of source texts. 	
<p>Course contents</p> <p>During the classes, students will be introduced to selected aspects of the chemical industry. Among them, they will be inform about the dyeing, food and biochemical industries. There will be known about technological processes and engineering techniques used in various branches of the chemical industry (various types of fermentations, techniques used in the metallurgical, electronic and biomedical industries). The economic issues of the chemical industry and its importance in the operation of the country's economy will be presented and discussed.</p>	
<p>Bibliography of literature</p> <p>Literature required to pass the course Ali El Ali Speight, Handbook of Industrial Chemistry – Organic Chemicals</p>	
<p>The learning outcomes (for the field of study and specialization)</p>	<p>Knowledge</p> <ol style="list-style-type: none"> 1. defines and presents selected chemical processes and engineering methods in the chemical industry 2. describes and illustrates selected industrial processes using chemical reactions 3. understands the relationships and dependencies between the economy and the functioning of the chemical industry
	<p>Skills</p> <ol style="list-style-type: none"> 1. uses chemical terminology to the extent necessary to present (in written and oral form) the content of the subject 2. predicts the course of selected industrial chemical reactions and the products of these transformations 3. uses the basic analytical techniques used in the analysis of industrial products 4. can indicate engineering techniques important in the chemical industry 5. can indicate significant economic aspects of the chemical industry
	<p>Social competence</p> <ol style="list-style-type: none"> 1. understands the need for continuous learning, 2. is aware of the need for a critical analysis of own work 3. shows cautious criticism in receiving information, especially available in the mass media 4. is aware of the need for honest and reliable work
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