



Subject card

Subject name and code	, PG_00057783						
Field of study	Green Technologies						
Date of commencement of studies	October 2023			Academic year of realisation of subject		2024/2025	
Education level	first-cycle studies			Subject group		Obligatory subject group in the field of study Subject group related to scientific research in the field of study	
Mode of study	Full-time studies			Mode of delivery		at the university	
Year of study	2			Language of instruction		English	
Semester of study	4			ECTS credits		7.0	
Learning profile	general academic profile			Assessment form		exam	
Conducting unit	Department of Organic Chemistry -> Faculty of Chemistry						
Name and surname of lecturer (lecturers)	Subject supervisor			prof. dr hab. inż. Dariusz Witt			
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	45.0	30.0	0.0	0.0	0.0	75
	E-learning hours included: 0.0						
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan		Participation in consultation hours		Self-study	SUM
	Number of study hours	75		10.0		90.0	175
Subject objectives	The structure of organic compounds is determined and classified by student. The mechanism of organic compounds formation and transformation is described by student. The students are able to compare and predict reactivity of organic compounds. The course of reaction and transformation of organic compounds are elucidated by students. The knowledge of reactions mechanism reflected in optimal transformation is appreciated by students. The theory is combined with practical synthesis of organic compounds.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_W02] has a basic knowledge of chemistry including general chemistry, inorganic, organic, physical, analytical, including the knowledge necessary to describe and understand the phenomena and chemical processes occurring in the environment; measurement and the determination of the parameters of these processes.		Student has got a knowledge of chemical transformations and basic methods of purification for organic compounds.		[SW1] Assessment of factual knowledge		
	[K6_U01] is able to obtain information from literature, databases and other sources, is able to integrate the information obtained, to make their interpretation, as well as draw conclusions and formulate and justify opinions, take part in the discussion		Student is able to gather information from chemical literature. The information is used to explain and understand scientific problems.		[SU1] Assessment of task fulfilment [SU3] Assessment of ability to use knowledge gained from the subject [SU4] Assessment of ability to use methods and tools		
	[K6_U05] can formulate and solve engineering tasks analytical methods, simulation as well as experimental, able to apply knowledge of basic physics and mathematics to analyze the results of experiments, is able to analyze and assess existing technical solutions		can formulate and solve engineering tasks related to organic chemistry		[SU3] Assessment of ability to use knowledge gained from the subject [SU1] Assessment of task fulfilment		
Subject contents	Basic purification techniques for organic compounds. The synthesis of selected solid and liquid compounds.						

Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	The synthesis of 4 compounds	60.0%	100.0%
Recommended reading	Basic literature	R.T. Morrison, R.N. Boyd "Organic Chemistry" Vogel, "Practical Organic Chemistry"	
	Supplementary literature	R.T. Morrison, R.N. Boyd "Organic Chemistry" Vogel, "Practical Organic Chemistry"	
	eResources addresses	Adresy na platformie eNauzanie:	
Example issues/ example questions/ tasks being completed	<ol style="list-style-type: none"> 1. Present the basic methods for purification of solid compounds. 2. . Present the basic methods for purification of liquid compounds. 3. What is the solid phase extraction? 		
Work placement	Not applicable		