

Subject card

Subject name and code	Don't be afraid to teach others, PG_00180086						
Field of study	Chemistry						
Date of commencement of studies	October 2025		Academic year of realisation of subject		2026/2027		
Education level	Bachelor's studies		Subject group		Optional subject group		
Mode of study	full-time studies		Mode of delivery		at the university		
Year of study	2		Language of instruction		Polish Polish		
Semester of study	3		ECTS credits		3.0		
Learning profile	academic		Assessment form		credit		
Conducting unit	Division of Didactics and Popular Science -> Faculty of Chemistry -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		dr Aleksandra Zahorska				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	45.0	0.0	0.0	0.0	45
	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	45		15.0		30.0	90
Subject objectives	The aim of the course is to familiarize students with modern methods of teaching and learning in chemistry education and their practical application.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[CHEML3_U08] Presents in an understandable way the basic facts about chemistry using a scientific language typical of chemical sciences.		The student is able to explain chemical concepts to others in an accessible way or to create teaching aids/educational tools related to chemistry education.		[SU1] oral statement/conversation/discussion [SU2] presentation/project/paper/report		
	[CHEML3_K07] Appreciates the need for understandable presentation of selected chemical issues to the public.		The student recognizes the need to communicate chemical concepts clearly and accessibly to primary and/or secondary school students as well as to peers.		[SK1] oral statement/conversation/discussion		
	[CHEML3_U09] Is able to learn independently.		The student is able to use 3D printing, gamification, and AI tools for self-directed learning.		[SU2] presentation/project/paper/report		
	[CHEML3_W11] Defines the basic principles of occupational health and safety and ergonomics necessary for the proper organization of learning.		The student knows how to create safe and hygienic learning conditions for themselves and others. The student is familiar with the principles of ergonomics when working with a computer.		[SW5] implementation of a problem task		
Subject contents	The course content relates to three thematic blocks connected with a modern approach to teaching and learning chemistry: 3D printing, gamification, and AI tools.						
Prerequisites and co-requisites	Basic computer skills and successful completion of the courses 'Inorganic Chemistry' and 'Organic Chemistry' are required.						

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Project from the 'AI Tools' module	51.0%	33.34%
	Project from the 'Gamification' module	51.0%	33.33%
	Project from the '3D Printing' module	51.0%	33.33%
Recommended reading	Basic literature	"Architektura wiedzy w szkole", 2013, Stanisław Dylak	
	Supplementary literature	"Konstruowanie wiedzy w szkole", 2002, Dorota Klus-Stańska	
	eResources addresses		
Example issues/ example questions/ tasks being completed	Operating a 3D printer in chemistry teaching or learning, creating educational games, and using AI tools for chemistry education.		
Work placement	Not applicable		

Document generated electronically. Does not require a seal or signature.