University of Gdańsk

Subject card

Subject name and code	Design work and student experiments, PG_00142579		
Field of study	Chemistry		
Date of commencement of studies	October 2025	Academic year of realisation of subject	2026/2027
Education level	Master's studies	Subject group	Obligatory subject group in the field of study Optional subject group
Mode of study	full-time studies	Mode of delivery	at the university
Year of study	2	Language of instruction	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 Bożena Karawajczyk	
	Teachers		

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	0.0	60.0	0.0	0.0	60

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	60	2.0	13.0	75

Subject objectives

Gain the ability to use chemical experiments in chemistry education and organize students' experimental activity

Learning outcomes

Course outcome	Subject outcome	Method of verification
	Knowledge D.1/E.1.W7. organization of work in the school classroom and groups: the need for individualization of teaching, the issue of interdisciplinary teaching, forms of work specific to the subject or type of classes: excursions, field and laboratory activities, experiments Skills D.1/E.1.U5. create didactic situations for activity and development of students' interests and popularization of knowledge; D.1/E.1.U10. Recognize typical for the taught subject or conducted classes student mistakes and use them in the didactic process; Social competencies D.1/E.1.K2. popularize knowledge among students and in school and extracurricular environments; D.1/E.1.K3. encourage students to make research attempts;	[SK6] demonstration of practical skills

Subject contents

- technique of school chemical experiment
- The use of laboratory method, including problem solving, in chemical education

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<tr><td>Prerequisites and co-requisites</td><td colspan="3"></td></tr>
<tr><td>Assessment methods and criteria</td><td colspan="3"><table><tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr><tr><td></td><td>51.0%</td><td>100.0%</td></tr></table></td></tr>
<tr><td rowspan="3">Recommended reading</td><td>Basic literature</td><td colspan="2">- Curriculum basis for the subject Chemistry at all stages of education (available on the website of the Ministry of Education)
- Current textbooks approved by the Ministry of Education for teaching chemistry in elementary and secondary school
- R. Piosik, B. Karawajczyk, Demonstration Technique and Laboratory Exercises in the Methodology of Teaching Chemistry and Environmental Protection, University of Gdansk Publishing House, 2004</td></tr>
<tr><td>Supplementary literature</td><td colspan="2">Current exercise books for teaching chemistry</td></tr>
<tr><td>eResources addresses</td><td colspan="2"></td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td colspan="3"></td></tr>
<tr><td>Work placement</td><td colspan="3">Not applicable</td></tr>
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