University of Gdańsk

Subject card

Subject name and code	General chemistry, PG_00196802						
Field of study	Biology						
Date of commencement of studies	October 2026		Academic year of realisation of subject	2026/2027			
Education level	Bachelor's studies		Subject group	Obligatory subject group in the field of study			
Mode of study	full-time studies		Mode of delivery	at the university			
Year of study	1		Language of instruction	Polish			
Semester of study	1		ECTS credits	1.0			
Learning profile	academic		Assessment form	credit			
Conducting unit	Faculty of Chemistry -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		prof. dr hab. Jolanta Kumirska				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	15.0	0.0	0.0	0.0	15
	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	15		2.0		8.0	25
Subject objectives	Auditorium exercises: Developing the ability to apply acquired knowledge to solve specific problems and tasks.						

Learning outcomes

Course outcome	Subject outcome	Method of verification
[BIOLL3_U01] is able to use basic research techniques and tools appropriate for the biological sciences and perform physical, chemical and biological observations and measurements in the laboratory and in the field, individually and in a team, while organizing her/his work appropriately and in a maintained way	Student plans, performs and carries out research experiments, organizes and analyzes the experimental results, draws correct conclusions based on them, and presents the experimental results in writing. Student selects and uses laboratory equipment in accordance with its intended purpose. Conducts calculations using the known chemical laws.	[SU3] text preparation/written work
[BIOLL3_K02] is ready to take care for her/his own safety and that of others, identifying threats and taking appropriate action, as well as use verified equipment and materials responsibly, ensuring their proper use	The student is prepared to follow safety rules in a chemical laboratory, identify hazards and take appropriate action, and use laboratory equipment and materials responsibly.	[SK1] oral statement/conversation/ discussion [SK3] text preparation/written work
[BIOLL3_W04] knows and understands at an advanced level the experimental methods and techniques used in biological sciences, as well as the principles of evaluation and analysis of natural processes and phenomena using physical and chemical measurements and IT tools for data processing and interpretation	The student knows and understands basic experimental methods and the principles of performing and analyzing physical and chemical measurements, and is able to use information technology tools to process and interpret experimental results.	[SW3] text preparation/written work
[BIOLL3_W08] knows the principles of occupational health and safety, intellectual property protection and the basics of copyright law	The student knows and applies occupational health and safety principles in a chemical laboratory, as well as the basic principles of intellectual property protection and copyright law when working with scientific materials.	[SW3] text preparation/written work

Subject contents

Auditorium exercises: Atomic, molecular and molar mass. The relationship of the structure of the atom with its position in the periodic table and the properties of the element. Chemical equation of the reaction, balancing, stoichiometric calculations. Molar and percentage concentration, density of solutions. Calculations related to ionic equilibria in solution: dissociation, hydrolysis, pH.

Prerequisites and co-requisites

lack

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
more than 50% in both tests, positive assessment of the student's work in classes	51.0%	100.0%

Recommended reading

Basic literature	1. Jones L., Atkins P. 2020. Chemia ogólna. PWN, Warsow 2. Lee J. D. 1994. Zwięzła chemia nieorganiczna. PWN, Warsow 3. Pauling L., Pauling P. 1997. Chemia. PWN, Warsow
Supplementary literature	1. Bielański A. 2012. Podstawy chemii nieorganicznej. Tom 1, 2. PWN, Warsow
eResources addresses	

Example issues/ example questions/ tasks being completed

Work placement

Not applicable

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