University of Gdańsk

Subject card

Subject name and code	MSc seminar, PG_00117798						
Field of study	Chemistry						
Date of commencement of studies	October 2024		Academic year of realisation of subject		2025/2026		
Education level	postgraduate 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		English		
Semester of study	4		ECTS credits		4.0		
Learning profile	academic		Assessment form				
Conducting unit	Faculty of Chemistry						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. Joanna Makowska				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	0.0	0.0	30.0	30
	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	30		5.0		65.0	100
Subject objectives	Development of in-depth skills in preparing and presenting oral presentations in English, mainly in the field of subjects related to the MA thesis. Preparation for independent collection and processing of scientific information based on literature searches. Knowledge of the principles of preparing and writing substantive and formally correct simple scientific publications, with particular emphasis on the thesis. Monitoring the progress of each student's project work in the framework of the parallel masters' workshop. Preparation for the master's exam.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[CHEMMU2_U08] Prepares and presents oral presentations in various fields of chemistry in Polish and English, using acquired knowledge and skills as well as basic sources of scientific information.	Student: demonstrates substantive preparation for the use of chemical literature, demonstrates extended skills in understanding scientific texts in the field of chemistry in English, develops and uses literature on scientific topics related to her/his master thesis, in order to use/ present them in the prepared master's thesis, logically and clearly presents the developed topic in the form of an oral presentation with a multimedia presentation, substantively participates in the discussion and shows interest in the subject presented by other speakers.	[SU1] oral statement/conversation/ discussion [SU2] presentation/project/paper/ report
	[CHEMMU2_W14] Explains the basic concepts and principles in the field of industrial property and copyright protection and recalls knowledge about the management of intellectual property resources; is able to use patent information.	Student: demonstrates basic knowledge of legal and ethical conditions related to scientific activities, including protection of intellectual property and copyright, demonstrates general knowledge in the field of broadly understood digital chemistry, with particular emphasis on the physics-based methods and data-based (chemoinfomratics) methods, presents expanded knowledge about current development directions and the latest scientific achievements in the field of the topic of master thesis.	[SW1] oral statement/ conversation/discussion
	[CHEMMU2_W13] Demonstrates knowledge of legal and ethical conditions related to scientific and didactic work.	-Student knows the basic concepts and principles related to the protection of intellectual property. Knows the assumptions of copyright and patent law - Student is aware of the consequences of disregarding intellectual property and the abuse of artificial intelligence tools in scientific, research and teaching work.	[SW1] oral statement/ conversation/discussion
	[CHEMMU2_W02] Has extended and in-depth knowledge in the field of basic chemistry.	Student is able to discuss specialized topics both in Polish and English, correctly arguing his or her conclusions in the field of chemistry at an advanced level in the research topic in which he or she is involved.	[SW2] presentation/project/paper/ report

Course outcome	Subject outcome	Method of verification
[CHEMMU2_U09] Has deepened ability to prepare various forms of oral presentations on chemistry in Polish and English.	-Student presents the research results: he begins with an introduction, presentation of the problem, methodology, results and conclusions. - Student uses charts, tables and infographics to illustrate his or her results. - The student speaks clearly and tries to avoid too technical language, discusses based on literature data - carefully studies existing research related to the topic and introduces his results in the context of what has already been published. - Student analyzes various points of view and arguments. It highlights the strengths and weaknesses of different approaches. - Student is able to practice his/ her speech, improve it, prepare for questions and possible counter-arguments. - Student respects other opinions and tries to find common points of understanding.	[SU2] presentation/project/paper/ report
[CHEMMU2_W15] Formulates general principles for creating and developing selected forms of individual entrepreneurship enabling the use of knowledge coming from science.	- Student can think analytically, logically and creatively. Student is aware that achievements in science provide flexibility and perspective in various professional fields. - Student knows how to educate himself to work in innovative technologies and is able to adapt to new challenges. - Student is able to define a clear goal or task that you want to achieve. Identifies the stages, operations and equipment involved in production. Student uses his knowledge in practice.	[SW3] text preparation/written work [SW5] implementation of a problem task
[CHEMMU2_W12] Knows the principles of occupational health and safety to the extent that allows independent work on a research and/or measurement position.	-Student understands the need to exercise due caution when using laboratory equipment and working with chemical reagents; -Student knows the applicable regulations and guidelines regarding occupational health and safety in his field. He is aware of how to prevent accidents and knows the appropriate equipment for his workstation	[SW1] oral statement/ conversation/discussion
[CHEMMU2_W10] Uses knowledge of the principles of operation of the basic scientific and research apparatus used in chemistry.	Student: names and describes methods of analysis and/or methods of computer theoretical calculations used during realization of master project distinguishes and characterizes individual experimental/ IT techniques used during realization of research project identifies scientific and research apparatuses used during realization of research project and explains the principles of their operations.	[SW1] oral statement/ conversation/discussion [SW5] implementation of a problem task

Course outcome	Subject outcome	Method of verification
[CHEMMU2_K05] Understands the need for independent search of information in scientific literature and popular science magazines.	Student: maintains criticism in expressing opinions and is open to the opinions of the environment, shows activity in deepening knowledge of the topics related to the master thesis and understands the need to constantly expand knowledge and skills, independently works on exploring English-language literature on the topic of master thesis and on related scientific tasks, involves in scientific discussions, demonstrates responsibility for detail and accurate providing scientific information	[SK2] presentation/project/paper/ report [SK5] implementation of a problem task
[CHEMMU2_U07] Defines and implements the directions of own further education.	-Student verifies the level of his knowledge and skills; understands the need for continuous professional education and personal development, demonstrates creativity in working independently and in a team. - Student knows his or her strengths. Knows how to conduct professional exploration in the future. Is able to regularly assess his progress and adapt his actions to new challenges.	[SU5] implementation of a problem task
[CHEMMU2_U10] Reads with understanding scientific and popular science chemical texts in English.	Student: performs scheduled experiments, makes observations analyzes the obtained results and compares them with available literature data draws conclusions from the conducted tests and proves their correctness in based on available literature data presents the same content in a different language convention systematically collects and prepares documentation of her/his research work	[SU5] implementation of a problem task

Subject contents

Rules for searching, collecting and processing scientific information based on various types of literature sources and databases in English.
Principles of written preparation and editing of substantive and formally correct simple scientific publications, with particular emphasis on the thesis in the field of exact and natural sciences.
Rules for preparing substantive and formally correct oral presentations at the popular science level in English, using multimedia techniques.

Multimedia presentations in the thematic field related to broadly understood digital chemistry, with particular emphasis on the physics-based methods and data-based (chemoinfomratics) methods, as well as issues related to realized master thesis.

Prerequisites and co-requisites

Knowledge of general, inorganic, and organic chemistry, biochemistry, and mathematics at the first-cycle education. Knowledge of basic issues in the field of quantum chemistry, chemometrics and/or related scientific fields. Specific knowledge and skills in programming in Python and/or R.

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Preparing and presenting oral presentations in English, mainly in the field of subjects related to the MA thesis.	100.0%	100.0%

Recommended reading	Basic literature	Literature required to pass the course A.1. Literature used during classes: Books and scientific articles related to the topic of master thesis A.2. Literature for individual studies Books and scientific articles related to the topic of master thesis
	Supplementary literature	Extracurricular readings Books and scientific articles related to the topic of master thesis
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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