University of Gdańsk

Subject card

Subject name and code	MSc workshop, PG_00144458						
Field of study	Environmental Protection						
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	Polish			
Semester of study	4		ECTS credits	12.0			
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	190.0	0.0	0.0	190
	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	190		5.0		20.0	215
Subject objectives	Substantive preparation and/or practical implementation of the experimental part in the field of the subject of the master's thesis						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[OŚMU2_U03] Plans and performs research tasks in the field or laboratory and interprets research results on environmental issues (working individually or in a team assuming various roles, including managerial functions).	-Student knows complex phenomena and processes occurring in nature, including those related to the spread of anthropogenic pollution, hence he is able to properly plan research tasks; explains and explains phenomena observed during research carried out as part of the master's thesis; recognizes and characterizes methods, techniques and research tools used in environmental protection; selects appropriate research methods to complete the master's thesis, characterizes the directions of development and knows the latest discoveries in the field of research carried out as part of the master's thesis. -Student is aware of the need to critically analyze one's own work - The student appreciates the need to be able to work in a team in accordance with his/her role in it (group leader/group member)	[SU5] implementation of a problem task
	[OŚMU2_K03] Undertakes professional and personal challenges, shows activity, undertakes efforts and is characterized by perseverance in undertaking individual and team actions in the field of environmental protection.	Student is critical in expressing opinions and remains open to the opinions of co-discussants - Student is active in expanding knowledge and appreciates the need for continuous learning - Student knows his or her strengths. He can determine what he is good at - Student participates in training and internships	[SK5] implementation of a problem task
	[OŚMU2_U05] Searches, selects and analyses the literature achievements of environmental sciences, including scientific journals and databases, reading and understanding scientific texts in her/his native language and in English.	-Student independently uses literature databases and critically selects source texts in both the native language and English. -Student is aware of the consequences of disregarding intellectual property and the abuse of artificial intelligence tools in scientific and research work.	[SU1] oral statement/conversation/ discussion [SU2] presentation/project/paper/ report [SU5] implementation of a problem task
	[OŚMU2_K06] Recognises the importance of knowledge in solving encountered cognitive and practical problems and consults experts in the event of difficulties in solving a problem on her/his own.	By reading scientific texts, the student learns to analyze and synthesize information, extract key concepts and understand complex chemical issues. - Student develops the ability to think critically and assess the quality of information regarding the research context and evaluate the results, also based on the opinion of experts. - Student is aware of the need to critically analyze his or her own work.	[SK3] text preparation/written work [SK5] implementation of a problem task

Course outcome	Subject outcome	Method of verification
[OŚMU2_W09] Applies safety and hygiene principles when working independently on a test or measurement stand in a laboratory or in the field.	Student: knows complex phenomena and processes occurring in nature, including those related to the spread of anthropogenic pollution; explains and explains the phenomena observed during the research carried out as part of the master's thesis recognizes and characterizes methods, techniques and research tools used in environmental protection; selects the appropriate research methods to complete the master's thesis characterizes the directions of development and knows the latest discoveries in the field of research carried out as part of the master's thesis knows and applies the rules of safety and hygiene when performing work on a research or measurement stand in a laboratory or in the field.	[SW5] implementation of a problem task
[OŚMU2_U06] Defines her/his interests and develops them within the chosen specialisation and themes of her/his master's thesis while implementing the process of self-education and planning of own future career.	Students: demonstrates the ability to conduct experiments related to the master's thesis; uses simple and advanced methods, techniques and tools to achieve the intended goals fluently searches for information in the literature on the subject (Polish and English) demonstrates the ability to write a master's thesis in Polish and a short scientific report in a foreign language based on their own research talks about issues related to the master's thesis in an understandable language; is able to define their interests and develop them within the selected specialization and the subject of the master's thesis; carries out the process of self-education and future career planning	[SU1] oral statement/conversation/ discussion [SU2] presentation/project/paper/ report

Course outcome	Subject outcome	Method of verification
[OŚMU2_K05] Critically assesses her/his own knowledge and the knowledge of the teams in which s/he works, can critically assess the content received.	Student: verifies the level of his knowledge and skills; understands the need for continuous professional training and taking care of personal development demonstrates creativity in independent and team work; is characterized by perseverance in taking up personal and professional challenges able to work in a group, assuming different roles in it is responsible for the safety of his own and others' work; knows how to act in emergency situations, is careful in handling chemical substances, is prudent in handling measuring equipment; understands the need to comply with the rules of professional ethics	[SK1] oral statement/conversation/ discussion
[OŚMU2_U08] Prepares a master's thesis using the appropriate methodology to prepare and write a scientific thesis containing a description and justification of the purpose of the thesis based on the current state of knowledge in a given topic as well as research methodology, results and their discussion.	-When preparing a written work, students correctly argue their conclusions in the field of chemistry, interpret and analyze related information with basic chemical and economic laws. - By reading scientific texts, the student learns to analyze and synthesize information, extract key concepts and understand complex issues.	[SU2] presentation/project/paper/ report [SU5] implementation of a problem task

Subject contents

The program content is varied and adapted to the scope of the master's thesis.

Prerequisites and co-requisites

First-cycle studies in chemistry, environmental protection, chemical engineering and related fields

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Carrying out the experimental part related to the subject of the master's thesis	100.0%	100.0%

Recommended reading

Basic literature	A. Literature required for the final completion of the course (passing the exam): A.1. used during classes Specialist literature in the field of the master's thesis. The scope of the literature is corrected and agreed on an ongoing basis, depending on the research topics being pursued A.2. studied by the student alone Specialist literature in the field of the master's thesis. The scope of the literature is corrected and agreed on an ongoing basis, depending on the research topics being pursued
Supplementary literature	B. Supplementary Literature Specialist literature in the field of the master's thesis. The scope of the literature is corrected and agreed on an ongoing basis, depending on the research topics being pursued
eResources addresses	Adresy na platformie eNauczanie:

Example issues/ example questions/ tasks being completed	
Work placement	Not applicable

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