

Course title Pracownia specjalizacyjna/Graduate laboratory course		ECTS code 13.3.1186	
Name of unit administrating study Faculty of Chemistry			
Studies			
Field of study	Type	Form	
Chemistry	Master	Full-time studies	
Dr hab. Jolanta Kumirska, prof. UG			
Forms of classes, the realization and number of hours		ECTS credits	
A. Forms of classes, in accordance with the UG Rector's regulations Laboratory classes		classes 180 h Tutorial classes 60 h Student's own work 60 h TOTAL: 300 h - 12 ECTS	
B. The realization of activities In-class learning			
Number of hours Laboratory classes 180 h			
The academic cycle First year, summer semester			
Type of course obligatory		Language of instruction Polish	
Teaching methods • Laboratory experiments		Form and method of assessment and basic criteria for evaluation or examination requirements	
		A. Final evaluation, in accordance with the UG study regulations Course completion (with a grade)	
		B. Assessment methods Realization of assignment/final work - performance of specific practical work	
		C. The basic criteria for evaluation or exam requirements • an assessment of the quality of performed master's researches, including substantive preparation, independence in their realization, correctness of conducted researches (if performed), correctness of interpretation of the obtained results	
Required courses and introductory requirements First cycle studies in chemistry, environmental protection, chemical engineering and related fields Knowledge of basic issues in the field of chemistry and / or related scientific fields			
Aims of education • Substantive and / or practical preparation for realization of experimental part in the field of master thesis			
Course contents The program content is varied and depends on the scope of the topic of the master thesis			

Bibliography of literature

A. Literature required to pass the course

A.1. Literature used during classes:

Books and scientific articles related to the topic of the master thesis

A.2. Literature for individual studies:

Books and scientific articles related to the topic of the master thesis

B. Extracurricular readings

Books and scientific articles related to the topic of the master thesis

Knowledge

Student:

- recognizes and characterizes methods, techniques and research tools used in chemistry;
- chooses the correct research methods to complete the master research thesis
- characterizes development directions and knows the latest discoveries in the field of research carried out as part of the master thesis
- knows and applies the principles of health and safety during realization of experimental work on a test or measuring stand in laboratory or in the field (outside)

Skills

- Student:
- has the ability to conduct experiments related to the master thesis; uses simple and advanced methods, techniques and tools to achieve goals intended in the master thesis
- is fluent in finding information in specialized literature (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 her/his own research
- discusses about issues related to the master thesis in understandable language; is able to define her/his interests and develop them within the chosen specialization and/or within the topic of the master thesis; carries out the process of self-education and planning future career

Social competence

Student:

- verifies the level of her/his knowledge and skills; understands the need for continuous vocational training and personal development
- demonstrates creativity in independent and team work; is characterized by perseverance in taking on personal and professional challenges
- can work in a group, taking in it various roles
- is responsible for the safety of own and other work; knows how to deal with emergencies, is careful working with chemicals, is careful working with measuring instruments; understands the need to comply with the principles of professional ethics