

<b>Course title</b> Pracownia specjalizacyjna/Graduate laboratory course		<b>ECTS code</b> 13.3.0522	
<b>Name of unit administrating study</b> Faculty of Chemistry			
<b>Studies</b>			
<b>Field of study</b>	<b>Type</b>	<b>Form</b>	
Chemistry	Master	Full-time studies	
Dr hab. Jolanta Kumirska, prof. UG			
<b>Forms of classes, the realization and number of hours</b>		<b>ECTS credits</b>	
<b>A. Forms of classes, in accordance with the UG Rector's regulations</b> Laboratory classes		classes 90 h Tutorial classes 30 h Student's own work 180 h TOTAL: 300 h - 12 ECTS	
<b>B. The realization of activities</b> In-class learning			
<b>Number of hours</b> Laboratory classes 90 h			
<b>The academic cycle</b> 2019/2020 summer semester			
<b>Type of course</b> obligatory		<b>Language of instruction</b> Polish	
<b>Teaching methods</b> • Laboratory experiments		<b>Form and method of assessment and basic criteria for evaluation or examination requirements</b>	
		<b>A. Final evaluation, in accordance with the UG study regulations</b> Course completion (with a grade)	
		<b>B. Assessment methods</b> Realization of assignment/final work - performance of specific practical work	
		<b>C. The basic criteria for evaluation or exam requirements</b>  • 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	
<b>Required courses and introductory requirements</b> 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			
<b>Aims of education</b>  • Substantive and / or practical preparation for realization of experimental part in the field of master thesis			
<b>Course contents</b> 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