UNIWERSYTET GDAŃSKI

Course title Pracownia magisterska/Laboratory course	**ECTS code** 13.3.0982

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

A. Forms of classes, in accordance with the UG Rector's regulations
Laboratory classes

B. The realization of activities
In-class learning

Number of hours
Laboratory classes 90 h

ECTS credits
classes 180 h
90 h in 3 semester
90 h in 4 semester
Tutorial classes 60 h
30 h in 3 semester
30 h in 4 semester
Student's own work 260 h
130 h in 3 semester
130 h in 4 semester
TOTAL: 500 h - 20 ECTS
250 h and 10 ECTS in 3 semester
250 h and 10 ECTS in 4 semester

The academic cycle
2020/2021 winter semester and 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 master project and presentation of the obtained results

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
Organic chemistry, Biochemistry, Physical chemistry, Spectrochemistry, Instrumental analysis, Intellectual property protection, Advanced chemistry laboratory
Knowledge of organic and physical chemistry and biochemistry at the first-cycle education, knowledge of the basic principles of occupational health and safety in a chemical laboratory, knowledge of the construction and operating principle of basic chemical apparatus used in the laboratory of organic synthesis and physicochemistry, knowledge of basic concepts and principles of property protection industrial and copyright law, the ability to synthesize simple organic compounds based on procedures written in Polish and English languages

Aims of education

• Planning and performance of experimental research project by each student working under the control /guidance of supervisor.
• Presentation of obtained research results in the form of written 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:

Specialist literature in the scope of realized master thesis. The scope of literature is corrected and still adopted to conducted master research topics

A.2. Literature for individual studies:

Specialist literature in the scope of realized master thesis. The scope of literature is corrected and still adopted to conducted master research topics

B. Extracurricular readings

Specialist literature in the scope of realized master thesis. The scope of literature is corrected and still adopted to conducted master research topics

Knowledge

Student:
• names and describes methods of synthesis and 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

Skills

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

Social competence

Student:
• works independently
• correctly defines priorities necessary for realization of her/his own aims
• cares for safety during own-self realization of chemical experiments
• takes into account the made arrangements for realization of experiments