KAPITAŁ LUDZKI
NARODOWA STRATEGIA SPÓJNOŚCI
Projekt współfinansowany przez Unię Europejską w ramach Europejskiego Funduszu Społecznego
UNIA EUROPEJSKA
EUROPEJSKI FUNDUSZ SPOŁECZNY

Course title	ECTS code
MSc Laboratory II	13.8.1338

Name of unit administrating study

null

Studies

faculty	field of study		
Wydział Oceanografii i Geografii	Marine Biotechnology	type	drugiego stopnia
		form	stacjonarne
		specialty	wszystkie
		specialization	wszystkie

Teaching staff

prof. dr hab. Hanna Mazur-Marzec; dr hab. Mariusz Grinholc, profesor uczelni; dr hab. Robert Czajkowski, profesor uczelni; prof. UG, dr hab. Konrad Ocalewicz; dr hab. Paulina Czaplewska, profesor uczelni

Forms of classes, the realization and number of hours

Forms of classes

Laboratory classes

The realization of activities

classroom instruction

Number of hours

Laboratory classes: 400 hours

ECTS credits

23
ECTS credits - 23
MSc laboratory - 400 h
Consultations - 50 h
Student's own work - 125 h
TOTAL - 575 h

The academic cycle

2024/2025 summer semester

Type of course

obligatory

Language of instruction

English

Teaching methods

- conducting experiments
- designing experiments

Form and method of assessment and basic criteria for eveluation or examination requirements

Final evaluation

Graded credit

Assessment methods

assignment work – completing a specific practical assignment

The basic criteria for evaluation

Assessment of the quality and progress of the master thesis research work, independence in its realization, ability of the student to correctly interpret the results

Method of verifying required learning outcomes

Learning outcomes	Planing experiments	Experimental work
	Knowledge	
KW_04	work plan, elaboration and interpretation of results	
	Skills	
KU_01		perfomance during MSc laboratories
	Competences	
KK_03		performance during MSc laboratories

Required courses and introductory requirements

A. Formal requirements

B. Prerequisites

Aims of education

The main aim is the practical use of the knowledge and skills acquired during the education process, with particular emphasis on the following aspects:

- acquiring the extended knowledge and understanding the advanced methods used in marine biotechnology (KW_04)
- extending his/her laboratory work skills including independently planning and conducting experiments, consulting their results with the tutor. The student will deepen his/her ability to independently document the conducted experiments and their results and learns to independently operate the research devices (KU_01)
- improving the ability to collect and interpret the obtained experimental data, gaining the ability to independently formulate conclusions based on experimental and literature data (KU_01).
- applying the principles of health and safety rules in a research laboratory, knows and understands the risks associated with conducting laboratory experiments, and is able to solve problems arising in laboratory work and recognizes the risks (KK_03).

Course contents

The course content varies and depends on the topic of master thesis

Bibliography of literature

Books and articles published in scientific journals related to the topic of master thesis
Students will select appropriate literature (scientific publications) according to the MSc project

The learning outcomes (for the field of study and specialization)

KW_04
KU_01
KK_03

Knowledge

KW_04 Possesses knowledge on the advanced methods used in marine biotechnology, especially those applied during MSc laboratory

Skills

KU_01 Possess the ability to plan and perform the laboratory experiments and document the results; is able to use research tools applied during MSc laboratory

Social competence

KK_03 - Has an ability to work in accordance with safety regulations, is responsible and can predict the potential hazard.

Contact

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Course title

MSc Seminar II

ECTS code

13.8.1343

Name of unit administrating study

null

Studies

faculty	field of study		
Wydział Oceanografii i Geografii	Marine Biotechnology	type	drugiego stopnia
		form	stacjonarne
		specialty	wszystkie
		specialization	wszystkie

Teaching staff

prof. dr hab. Hanna Mazur-Marzec; dr hab. Robert Czajkowski, profesor uczelni

Forms of classes, the realization and number of hours

Forms of classes

Seminar

The realization of activities

classroom instruction

Number of hours

Seminar: 30 hours

ECTS credits

10
ECTS credits - 10 ECTS
MSc Seminar - 30 h
Consultations 50 h
Student's own work - 170 h
TOTAL 250 h

The academic cycle

2024/2025 summer semester

Type of course

obligatory

Language of instruction

English

Teaching methods

- Presentation prepared by students
- text analysis and discussion

Form and method of assessment and basic criteria for eveluation or examination requirements

Final evaluation

Graded credit

Assessment methods

assignment work – project or presentation

The basic criteria for evaluation

- Preparation and presentation of materials related to the master thesis
- Ability to contribute to group discussion.
- Final grade will be based on partial grades obtained during semester. Students must obtain at least a satisfactory grade for every assessed learning outcome.

Method of verifying required learning outcomes

Learning outcomes	Text analysis	Presentation made by student
	Knowledge	
KW_04	Discussion during seminar	
	Skills	
KU_03		Presentation and interpretation of results obtained by students
	Competences	
KK_01	Contribution to group discussion	

Required courses and introductory requirements

A. Formal requirements

B. Prerequisites

Aims of education

- Acquisition by students of knowledge and understanding of advanced methods used in marine biotechnology (KW_04)
- Acquisition the ability to present, interpret and discuss the results of research work (KU_03)
- Acquisition of the ability to critically assess own knowledge and constantly improve it (KK_01)

Course contents

The course covers issues concerning different aspects of biotechnology and topics related to the master thesis; rules for collecting and processing scientific information based on various literature sources and databases; principles of preparation, writing and editing master thesis and research papers.
Scientific writing and presentations of the research results
How to present the results:
Figures, Tables and captions preparation
High-throughput data analysis, presentations, and storage
Discussion and the conclusions drawn results
Literature organization and citation
When the appendix is useful

Bibliography of literature

Books and articles published in scientific journals related to the topic of master thesis
Students will select appropriate literature (scientific publications) according to the MSc project
The internet resources, e.g.:
How to Write a Masters Thesis: The Ultimate Guide to Writing a Master's Thesis | With Format, Guidelines, and Samples - Acknowledgement World

The learning outcomes (for the field of study and specialization)

KW_04
KU_03
KK_01

Knowledge

KW_04 - Student Possesses knowledge on the advanced methods used in marine biotechnology, especially those applied during MSc laboratory

Skills

KU_03 Student possess the ability to present and interpret the results obtained during MSc laboratories, has the ability to participate in a group discussion

Social competence

KK_01 - Student has an ability to critically assess his own knowledge on marine biotechnology and is willing to constantly improve and update it.

Contact

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