

Subject card

Subject name and code	Marine pharmacology - laboratory, PG_00099403						
Field of study	Marine Biotechnology						
Date of commencement of studies	October 2024	Academic year of realisation of subject			2024/2025		
Education level	postgraduate studies	Subject group					
Mode of study	full-time studies	Mode of delivery			at the university		
Year of study	1	Language of instruction			English English		
Semester of study	2	ECTS credits			3.0		
Learning profile	academic	Assessment form					
Conducting unit	Pracownia Biotechnologii Morskiej -> Katedra Biologii Morza i Biotechnologii -> Faculty of Oceanography and Geography						
Name and surname of lecturer (lecturers)	Subject supervisor		prof. dr hab. Hanna Mazur Marzec				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	45.0	0.0	0.0	45
	E-learning hours included: 0.0						
	Additional information: Laboratory classes						
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	45		5.0		20.0	70
Subject objectives	Familiarizing with main methods used for activity and drugability assessment of drug candidates						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[MBMU2-KW04] Knows and deeply understands advanced research methods used in marine biotechnology and related sciences	The student will be able to use equipment and materials in the biochemistry and cell culture laboratory. The student will be able to design and safely perform basic assays evaluating marine bioproducts as potential drugs and experiments with model organisms and microorganisms. The students will be able to document the procedures and results in a form of written report.	[SW1] oral statement/conversation/discussion [SW2] presentation/project/paper/report
	[MBMU2-KU01] Can plan and carry out tests in the laboratory and at sea, and document activities and results; can use laboratory equipment under the guidance of a tutor; applies principles of occupational health and safety	The student will be able to use equipment and materials in the biochemistry and cell culture laboratory. The student will be able to design and safely perform basic assays evaluating marine bioproducts as potential drugs and experiments with model organisms and microorganisms. The students will be able to document the procedures and results in a form of written report.	[SU1] oral statement/conversation/discussion [SU2] presentation/project/paper/report [SU6] demonstration of practical skills
	[MBMU2-KK04] Is ready to assess and understand the risks and dilemmas, including ethical dilemmas associated with conducting scientific research and introduction of advanced technologies; understands and appreciates the importance of intellectual property; acts ethically	The student will be able to discuss and evaluate the hazards and ethic dilemmas connected with the development of marine products as bio-pharmaceuticals, including the hazards and ethical considerations of pre-clinical and clinical trials.	[SK1] oral statement/conversation/discussion
Subject contents	In vitro assessment of cytotoxic activity, enzymatic assays, antimicrobial activity, quorum quenching, assessment of drug stability under physiological conditions, selected ADME assays, principles of mammalian cell culture, principles of work with a model organism <i>C. elegans</i> , antiviral activity of marine bioproducts		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	report	51.0%	20.0%
	work during laboratory classes	51.0%	40.0%
	writing tests	51.0%	40.0%
Recommended reading	Basic literature	Selected articles from scientific journals and materials elaborated by teacher	
	Supplementary literature	Selected articles from scientific journals and materials elaborated by teacher	
	eResources addresses	Uzupełniająca Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		

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