

Subject card

Subject name and code	Diseases of Marine Organisms - lecture, PG_00204931						
Field of study	Oceanography						
Date of commencement of studies	October 2026	Academic year of realisation of subject			2027/2028		
Education level	Master's studies	Subject group			Obligatory subject group in the field of study Optional subject group Subject group related to scientific research in the field of study		
Mode of study	full-time studies	Mode of delivery			at the university		
Year of study	2	Language of instruction			Polish		
Semester of study	3	ECTS credits			1.0		
Learning profile	academic	Assessment form			exam		
Conducting unit							
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. Katarzyna Smolarz				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	0.0	0.0	0.0	15
	E-learning hours included: 0.0						
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	15		1.0		9.0	25
Subject objectives	The aim of the course is to provide information about diseases occurring in marine organisms and their applicatory function. Based on obtained knowledge, after the course the student should be able to characterise and recognise basic aspect of health and diseases and be able to diagnose them..						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[OCEANMU2-U08] is able to prepare a study of a given issue/ problem in Polish and a selected foreign language in written form (short scientific text, documented research work) and orally (paper, presentation) and discuss with specialists on topics related to oceanographic issues, with particular emphasis on the studied specialty	can prepare a study of a selected issue/problem in Polish and English in written form (short scientific text, documented research work) and orally (paper, presentation) and discuss topics related to oceanographic issues in the thematic scope related to diseases of free-living marine organisms	[SU4] test/exam - oral or written
	[OCEANMU2-W02] knows and understands complex processes and phenomena occurring in the marine environment, with particular emphasis on the coastal zone, as well as complex relationships between living and non-living elements of the aquatic environment	knows and understands in-depth the course of complex processes and phenomena occurring in communities of marine organisms in relation to their condition and well-being, as well as the complex relationships between living and non-living elements of the marine environment (program contents 1-4)	[SW4] test/exam - oral or written
	[OCEANMU2-W06] knows and identifies potential threats to the marine environment on a local and global scale resulting from strong anthropopressure, predicts their effects on various time and space scales	knows and identifies potential threats to the marine environment on a local and global scale resulting from strong anthropopressure, predicts their effects on the condition and well-being of marine organisms (program content 4)	[SW4] test/exam - oral or written
Subject contents	1 characteristics of the state defined as the full health of the body and various types of deviations from this state, which result in damage to the functions or structure of the body. 2 Definition of disease, pathogen, stress as a pathogen, diagnosis of diseases in free-living marine organisms. 3 Discussion of currently recognized diseases and pathological changes occurring in free-living organisms and their consequences at various levels of biological organization. 4 Diseases and pathological changes as indicators of the degree of environmental pollution.		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	final exam	51.0%	100.0%
Recommended reading	Basic literature	Klatt E. C., Edward C., Klatt MD., Vinay, Kumar MD., Kumar V., 2000. Review of pathology, W B Saunders; 1st edition Cotran R. S., Kumar V., Collins T., Robbins S. L., 1999. Pathologic basis of disease, W B Saunders; 6th edition Kinne O. 1980. Diseases of marine animals Vol. I, General aspects, Protozoa to Gastropoda, Wiley & Sons Hopkin S.P., Sibly R.M., Peakall D.B., 2002. Podstawy ekotoksikologii, Wyd. PWN Malicka E., Materiały pomocnicze do ćwiczeń z histopatologii zwierząt, 2008, SGGW, Warszawa	
	Supplementary literature	Hochberg F.G., 1990. Diseases of marine animals Vol. III, Introduction, Mollusca: Cephalopoda, Crustacea, etc. to Urochordata., Kinne O. (red), Biologische Anstalt Helgoland, Hamburg; Howard D., Lewis E.j., Keller J., Smith C.S., 2004, Histological techniques for Marine bivalve mollusks and crustaceans, NOAA Kammenga, J., Laskowski, R., 2000. Demography in Ecotoxicology. John Wiley & Sons. Kuryszko J., Zarzycki J., Histologia zwierząt, 2000, Państwowe wydawnictwo Rolnicze i Leśne, Warszawa	
	eResources addresses		
Example issues/ example questions/ tasks being completed	none		
Work placement	Not applicable		