

Subject card

Subject name and code	Marine mammals - biology and management, PG_00117877						
Field of study	Oceanography						
Date of commencement of studies	October 2024	Academic year of realisation of subject			2024/2025		
Education level	postgraduate studies	Subject group			Obligatory subject group in the field of study		
Mode of study	full-time studies	Mode of delivery			at the university		
Year of study	1	Language of instruction			Polish		
Semester of study	2	ECTS credits			1.0		
Learning profile	academic	Assessment form					
Conducting unit	Stacja Morska im. Profesora Krzysztofa Skóry -> Faculty of Oceanography and Geography						
Name and surname of lecturer (lecturers)	Subject supervisor		dr Iwona Pawliczka Vel Pawlik				
	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		6.0		10.0	31
Subject objectives	<p>Learning about life strategies related to the challenges of the marine environment, like feeding, communication, and reproduction. Building awareness of the ecological role of marine mammals in aquatic ecosystems. Presentation of the importance of the health condition of marine mammals in the survival against the challenges of the aquatic environment. Familiarization with conservation conflicts in population management, the importance of knowledge about species and new research methods for the effective management of human activities in the protection of marine mammals and their habitats.</p>						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[OCEANMU2-W01] knows and understands in-depth specialized terminology used in oceanography and related sciences (in Polish and a selected foreign language)	the student has an in-depth understanding of the specialized terminology relevant to marine mammal science	[SW4] test/exam - oral or written
	[OCEANMU2-W07] knows and understands legal regulations, principles of sustainable development of the marine environment, its protection and management of the marine environment and its resources	the student knows and understands the basic legal regulations and principles regarding the sustainable development of the marine environment and nature protection as well as the management of the marine environment and its resources	[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	the student knows and identifies potential threats resulting from high anthropopressure for marine mammals, especially in coastal areas of seas and oceans, and knows and understands the impact of human activities on the condition of marine ecosystems, knows the benefits of using its resources	[SW4] test/exam - oral or written
[OCEANMU2-U02] can use scientific terminology fluently and appropriately in presenting and discussing problems in the field of oceanography	the student is able to fluently and appropriately use current scientific terminology in presenting and discussing problems in the field of marine mammals	[SU4] test/exam - oral or written	
Subject contents	<p>Variety of the degree of adaptation of marine mammals to life in the aquatic environment. Behavioral ecology as a cognitive tool in marine mammal science.</p> <p>Life strategies of marine mammals, i.e. feeding, reproduction, protection against predators, lifespan and mortality, social life.</p> <p>Health condition as a condition for the survival of marine mammals in the marine environment. Parasitism in marine mammals as a pathogenic element and a factor in interactions with humans.</p> <p>The importance of habitat sustainability for marine mammals.</p> <p>Managing the exploitation and conservation of marine mammals as a social process.</p>		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	oral presentation	51.0%	100.0%

Recommended reading	Basic literature	<p>Gójska, A., Pawliczka, I. Program Ochrony Morświna, GDOŚ, 2015.</p> <p>Jefferson, T.A., Webber, M.A., Pitman, R. Marine Mammals of the World: A comprehensive Guide to their identification. Academic Press. 2018</p> <p>Society for Marine Mammalogy, Committee of Taxonomy. Marine Mammals Species List. 2024.</p> <p>Evans, P. i Raga, T. (ed.) Marine Mammals: Biology and Conservation. Kluwer Academic/Plenum Publishers. 2001</p> <p>Brennecke, D. Knickmeier, K., Pawliczka, I., Siebert, U., Wahlberg, M. Marine Mammals: A Deep Dive into the World of Science. Springer, 2023</p>
	Supplementary literature	<p>Carlén I., Thomas L., Carlström J., Amundin M., Teilmann J., Tregenza N., Tougaard J., Koblitz J.C., Sveegaard S., Wennerberg D., Loisa O., Dähne M., Brundiers K., Kosecka M., Kyhn L.A., Ljungqvist C.T., Pawliczka I., Koza R., Arciszewski B, Galatiuse A., Jabbusch M., Laaksonlaita J., Niemi J., Lyytinen S., Gallus A., Benke H., Blankett P., Skóra K.E., Acevedo-Gutiérrez A., Basin-scale distribution of harbour porpoises in the Baltic Sea provides basis for effective conservation actions, Biological Conservation, Volume 226: 42-53. 2018</p> <p>Głowaciński (red) Polska Czerwona Księga Zwierząt IUCN Red List of Threatened Species (online) 2001</p> <p>Marine Mammal Necropsy: An introductory guide for stranding responders and field biologists. Woods Hole Oceanographic Institution. 2007 (online)</p> <p>State of the Baltic Sea - Second HELCOM Holistic Assessment 2011-2016 (online) Varjopuro R Co-existence of seals and fisheries? Adaptation of a coastal fishery for recovery of the Baltic grey seal. Marine Policy 35:450456. 2011</p>
	eResources addresses	<p>Podstawowe</p> <p>https://marinemammalscience.org - current taxonomy of marine mammals, description and characterization of species according to the best latest knowledge</p> <p>Adresy na platformie eNauczenie:</p>
Example issues/ example questions/ tasks being completed	<p>The role of marine mammals in the marine ecosystem.</p> <p>Methods for estimating marine mammal populations.</p> <p>The importance of post-mortem research for marine mammal conservation management.</p> <p>Reproductive strategies of Mysticeti.</p> <p>Types of ectoparasites of marine mammals and their importance for the health of the hosts.</p>	
Work placement	Not applicable	