

Subject card

Subject name and code	Biology for Oceanographers - lecture, PG_00206111						
Field of study	Oceanography						
Date of commencement of studies	October 2026	Academic year of realisation of subject			2026/2027		
Education level	Bachelor's studies	Subject group			Obligatory subject group in the field of study 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	1	Language of instruction			Polish		
Semester of study	1	ECTS credits			3.0		
Learning profile	academic	Assessment form			exam		
Conducting unit	Laboratory of Phycology -> Department of Marine Biology and Biotechnology -> Faculty of Oceanography and Geography -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		dr Ilona Złoch				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	0.0	0.0	0.0	30
	E-learning hours included: 0.0						
	Additional information: a lecture with a multimedia presentation						
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	30		1.0		44.0	75
Subject objectives	Introduction to the basics of cytology, anatomy, morphology and physiology. Introduction to a general overview of organisms systematic and the basic concepts of ecology.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[OCEANL3-W02] has a broad knowledge and understanding of physical, biological, chemical, and geological processes and phenomena occurring in aquatic environments, with particular emphasis on the marine environment	Student knows and understands the basic processes of the water environment, the structure and function of prokaryotic and eukaryotic cells, identifies and correctly describes the basic physiological processes occurring in cells and knows the factors regulating biochemical processes, with particular attention to marine organisms, describes and explains the various stages of asexual and sexual reproduction, describes particular groups of organisms in the aquatic environment with particular emphasis on the marine environment, describes the basic levels of life organization in the marine environment (1-10);	[SW4] test/exam - oral or written
	[OCEANL3-W01] has an advanced knowledge and understanding of the terminology used in oceanography and related exact and natural sciences (in Polish and a selected foreign language)	Student knows and understands, at an advanced level, proper terminology used in oceanography, with particular emphasis on biological sciences in the field of cytology, anatomy, morphology and physiology of cells and tissues (1-4);	[SW4] test/exam - oral or written
Subject contents	<p>The issue of lecture</p> <ol style="list-style-type: none"> 1 Organization of the living world, theories of biogenesis, levels of organization of life, cell theory of organisms body. 2 Structure and function of prokaryotic and eukaryotic cells. 3 Cell cycle. Reproduction of organisms, selected development cycles. 4 Construction of organisms with and without tissues. 5 Methods of organisms feeding. 6 Methods of organisms respiration. 7 Systematics and evolution, organizational levels. 8 Phenetic and phylogenetic classification. 9 Technique for describing and naming taxonomic units. 10 Basic ecological concepts, with particular emphasis on marine ecology. 		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	exam	51.0%	100.0%
Recommended reading	Basic literature	<p>Literature required for the final completion of the course (passing the exam):</p> <ol style="list-style-type: none"> 1. used during classes <ul style="list-style-type: none"> Campbell N., Reece J., Urry L., Cain M., Wasserman S., Minorsky P., Jackson R., BIOLOGIA, wyd. REBIS 2012, Poznań Szweykowska A., Szweykowski J., Botanika, tom. I, 2001, Wyd. PWN, Warszawa Solomon E.P., Berg L.R., Martin D.W., Ville C.A., 1996, Biologia, Multico Oficyna Wydawnicza, Warszawa Kawiak J., Mirecka J., Olszewska M., Warchoła J., Podstawy cytofizjologii, Wyd. PWN, 1997, Warszawa Stryer L., Biochemia. 2005, PWN, Warszawa , Maćkowiak M., Michalak A., Biologia (Jedność i różnorodność), 2008, Wyd. PWN, Warszawa 2. studied by the student <ul style="list-style-type: none"> Kopcewicz J., Lewak S., Podstawy fizjologii roślin, 1998, Wyd. PWN, Warszawa 	

	Supplementary literature	<ol style="list-style-type: none"> 1. Alberts B. i wsp. Podstawy biologii komórki. 2005, PWN Warszawa 2. Kilarski, W. Strukturalne podstawy biologii komórki. 2003, Wyd. Naukowe PWN 3. Kłyszajko-Stefanowicz L. Cytobiochemia. 2002, Wyd. Naukowe PWN 4. Wojtaszek P., Michejda J., 5. Ratajczak, Biologia komórki roślinnej. T.1 Struktura, T.2 Funkcja. 2009, Wyd. Naukowe PWN 6. Woźny A. i in. [red.] 2001. Podstawy biologii komórki roślinnej, Wyd. Naukowe UAM, Poznań
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Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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