University of Gdańsk

Subject card

Subject name and code	Principles of Narine Invertebrates Biology - lecture, PG_00205275		
Field of study	Oceanography		
Date of commencement of studies	October 2027	Academic year of realisation of subject	2028/2029
Education level	Bachelor'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	4	ECTS credits	2.0
Learning profile	academic	Assessment form	exam
Conducting unit			
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. Luiza Bielecka, prof. UG	
	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

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	2.0	18.0	50

Subject objectives

To familiarize the student with the biology and ecology of marine invertebrates, the diversity of these animals, the specific structure of their bodies, including basic identification features used to recognize animals at various taxonomic levels and features indicating adaptations to the environment.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[OCEANL3-W05] has an advanced knowledge of techniques, research methods, and tools (mathematical, statistical, and computational) used by oceanographers to describe and interpret processes and phenomena occurring in the marine environment	Knows at an advanced level techniques, research methods and tools used for identification analyzes of marine invertebrates in order to describe and interpret phenomena and processes occurring in the marine environment	[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)	Knows and understands in-depth specialized terminology used in oceanography and related sciences (in Polish, English and/or Latin) with particular emphasis on the biology and ecology of marine invertebrates	[SW4] test/exam - oral or written
[OCEANL3-U01] is able to use the current scientific terminology in the field of oceanography in various forms of expression	Can use scientific terminology fluently and appropriately in presenting and discussing problems in the field of oceanography with particular emphasis on the biology and ecology of marine invertebrates	[SU4] test/exam - oral or written

<table>
<tr><td>Subject contents</td><td colspan="3">A detailed review of all marine invertebrate taxa, starting from Protista through the main taxonomic groups, with particular emphasis on the fauna of the Baltic Sea. Functional morphology, comparative anatomy, animal taxonomy (diagnostic features specific to subsequent levels of taxonomy). Adaptive features related to the type of nutrition and the area of occurrence of individual taxonomic units, adaptations of organisms to various environmental conditions.</td></tr>
<tr><td>Prerequisites and co-requisites</td><td colspan="3"></td></tr>
<tr><td>Assessment methods and criteria</td><td colspan="3"><table><tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr><tr><td>oral exam</td><td>51.0%</td><td>100.0%</td></tr></table></td></tr>
<tr><td rowspan="3">Recommended reading</td><td>Basic literature</td><td colspan="2">Błaszak Cz., 2009. Zoologia, Bezkręgowce, tom I i II. PWN.
Grabda E., 1986. Zoologia. Bezkręgowce. PWN.
Jura Cz., 1997. Bezkręgowce. PWN.
Mańkowski Wł., 1955. Atlas zooplanktonu Bałtyku. Morski Instytut Badawczy. Gdynia.
Nybakken, J. W., M. D. Bertness, 2005. Marine biology an ecological approach, Pearson Education, San Francisco.
Smith, D. L., K. B. Johnson, 1996. A guide to marine coastal plankton and marine invertebrate larvae. Kendall/Hunt Publishing Com-pany, USA.
Sumich, J. L., J. F. Morrissey, 2004. Introduction to the biology of marine life, Jones & Bartlett Publishers, Sudbury.
Todd, C. D., M. S. Laverack, G. A. Boxshall, 2006. Coastal Marine Zooplankton. A practical manual for students, Cambridge Uni-versity Press,
Cambridge.
Żmudziński L., 1990. Świat zwierzęcy Bałtyku. Atlas makrofauny. Wydawnictwo Szkolne i Pedagogiczne, Warszawa.</td></tr>
<tr><td>Supplementary literature</td><td colspan="2">Supplemental literature is determined based on students' interests.</td></tr>
<tr><td>eResources addresses</td><td colspan="2"></td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td colspan="3"></td></tr>
<tr><td>Work placement</td><td colspan="3">Not applicable</td></tr>
</table>

Document generated electronically. Does not require a seal or signature.