University of Gdańsk

Subject card

Subject name and code	Zoology of invertebrates, PG_00196869		
Field of study	Biology		
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	2.0
Learning profile	academic	Assessment form	credit
Conducting unit	Katedra Zoologii Bezkręgowców i Parazytologii -> Faculty of Biology -> Rector		
Name and surname of lecturer (lecturers)	Subject supervisor	dr Marta Zakrzewska	
	Teachers	dr Marta Zakrzewska dr Karolina Cierocka dr Błażej Bojarski dr Sonia Zięba dr Katarzyna Faleńczyk-Koziróg	

Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	30.0	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	1. The knowledge of the major types of invertebrate animals and protists (Protozoa). 2. An understanding of the principal mechanisms and trends in the evolution of the animals discussed. 3. The capacity to distinguish the main categories of animals studied.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[BIOLL3_U01] is able to use basic research techniques and tools appropriate for the biological sciences and perform physical, chemical and biological observations and measurements in the laboratory and in the field, individually and in a team, while organizing her/his work appropriately and in a maintained way	conducts biological observations of the structure and functioning of invertebrate organisms, uses basic equipment and research tools employed in invertebrate systematics, and follows the correct sequence of procedures in laboratory work	[SU1] oral statement/conversation/ discussion [SU5] implementation of a problem task [SU6] demonstration of practical skills [SU8] observation of student's independent or team work
[BIOLL3_W01] knows and understands at an advanced level the structure and functioning of organisms at all levels of the organization of life - from the cell (prokaryotic and eukaryotic), through tissues, organs, to the organism - as well as the relationships between them and their adaptations to the environment	describes the structure of different groups of invertebrates, taking into account functional relationships at the cellular (Protozoa, Chromista), tissue, organ and organismal levels	[SW4] test/exam - oral or written [SW1] oral statement/ conversation/discussion
[BIOLL3_U09] is able to learn independently and plan her/his own development in an organized and controlled manner	engages in self-directed learning by preparing the assigned topics	[SU1] oral statement/conversation/ discussion [SU4] test/exam - oral or written
[BIOLL3_K02] is ready to take care for her/his own safety and that of others, identifying threats and taking appropriate action, as well as use verified equipment and materials responsibly, ensuring their proper use	takes responsibility for the equipment and materials entrusted to them and for their own work, and respects the work of others	[SK1] oral statement/conversation/ discussion [SK8] observation of student's independent or team work
[BIOLL3_U03] is able to search for, select and critically analyze information from various sources, including scientific literature and electronic databases, as well as read and understand scientific texts in Polish and English	independently searches for and uses available sources of biological information, including electronic sources; is able to read and critically analyse them in Polish and English	[SU1] oral statement/conversation/ discussion [SU3] text preparation/written work
[BIOLL3_K04] is ready to apply the principles of bioethics, scientific integrity and honesty, including the proper handling of biological material and respect for intellectual property	consciously applies the principles of bioethics, scientific integrity and professional ethics, including respect for intellectual property	[SK1] oral statement/conversation/ discussion [SK8] observation of student's independent or team work

Subject contents

A review of selected systematic groups of invertebrates (characteristics and systematic position) with particular reference to domestic species.
A consideration of the human use of invertebrates and their economic importance and role in nature.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
entry tests	51.0%	25.0%
colloquium I	51.0%	25.0%
practical assessment	51.0%	25.0%
attendance	93.0%	0.0%
colloquium II	51.0%	25.0%

Recommended reading

Basic literature

Literature used in class:
Błaszak C. (red.) 2009, 2011, 2015. Zoologia, t. 1-3. PWN, Warszawa.
Czapik A. 1992. Podstawy protozoologii. Wyd. 2. PWN, Warszawa.
Grabda E. (red.) 1989. Zoologia bezkręgowce, t. 1. PWN, Warszawa.

Literature studied independently by the student:
Błaszak C. (red.) 2009, 2011, 2015. Zoologia, t. 1-3. PWN, Warszawa.
Czapik A. 1992. Podstawy protozoologii. Wyd. 2. PWN, Warszawa.
Grabda E. (red.) 1989. Zoologia bezkręgowce, t. 1. PWN, Warszawa.
Moraczewski J., Riedel W., Sołtyńska M., Umiński T. 1984. Ćwiczenia z zoologii bezkręgowców. PWN Warszawa.

	Supplementary literature	Brusca R.C., Moore W., Shuster S.M. 2016. Invertebrates. 3rd Edition. Sinauer Associates Inc. Publishers, Sunderland, MA. Dogiel W.A. 1986. Zoologia bezkręgowców. PWRiL Warszawa. Dzik J. 2015. Zoologia. Różnorodność i pokrewieństwa zwierząt. WUW, Warszawa. Gębicki C., Szwedo J. 2000. Owady Polski. Klucz i atlas. Kubajak, Krzeszowice. Giłka W., Zakrzewska M. 2013. A contribution to the systematics of Neotropical Tanytarsus van der Wulp: first descriptions from Ecuador (Diptera: Chironomidae: Tanytarsini). Zootaxa 3619: 453:459. Giribet G., Edgecombe G.D. 2020. The Invertebrate Tree of Life. Princeton University Press, Princeton, NJ. Grabda E. (red.) 1989. Zoologia bezkręgowce, t. 2-5, PWN, Warszawa. Jura C. 2007. Bezkręgowce. Podstawy morfologii funkcjonalnej, systematyki i filogenezy. PWN, Warszawa. Moore J. 2009. Wprowadzenie do zoologii bezkręgowców. WUW, Warszawa. Urbanek A. 2007. Jedno istnieje tylko zwierzę Myśli przewodnie biologii porównawczej. Muzeum i Instytut Zoologii PAN, Warszawa.
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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