

Subject card

Subject name and code	Invertebrate taxonomy, PG_00154435						
Field of study	Biology						
Date of commencement of studies	October 2024		Academic year of realisation of subject			2026/2027	
Education level	undergraduate 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	3		Language of instruction			Polish	
Semester of study	5		ECTS credits			2.0	
Learning profile	academic		Assessment form				
Conducting unit	Katedra Zoologii Bezkręgowców i Parazytologii -> Faculty of Biology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr Marta Zakrzewska				
	Teachers						
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		4.0		16.0	50
Subject objectives	A working knowledge of the basic types of invertebrates and their relationships to the environment. Familiarisation with the Code of Zoological Nomenclature. The ability to obtain and prepare material for taxonomic studies. The ability to use and independently compile zoological keys.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[BIOLL3_W05] The graduate knows the rules and describe the mechanisms of life at the population, biocenosis and ecosystem levels and the temporal and spatial determinants of biodiversity	The student is able to identify the characteristics of selected invertebrate taxa and relate them to their habitat.	[SW4] test/exam - oral or written [SW2] presentation/project/paper/report
	[BIOLL3_W06] The graduate will know the characteristics, systematics and understand the evolution of selected groups of organisms including molecular basis and basic concepts and mechanisms of evolution	The student provides an overview of the various types of natural environments and describes selected groups of invertebrates, including those found in coastal areas. Additionally, the student presents methods and forms of their protection.	[SW4] test/exam - oral or written
	[BIOLL3_K02] The graduate is prepared to critically self-assess their own competences and to update and improve their knowledge and skills	The student is aware of the necessity for honesty and integrity in academic and professional work.	[SK1] oral statement/conversation/discussion [SK2] presentation/project/paper/report [SK8] observation of student's independent or team work
	[BIOLL3_K01] The graduate is prepared to evaluate their own knowledge, understand the need for continuous learning and development, and is open to new ideas	The student is aware of the limitations of their own knowledge and is willing to engage in continuous learning and development. They are open to new ideas, such as a novel approach to invertebrate systematics.	[SK1] oral statement/conversation/discussion [SK8] observation of student's independent or team work
	[BIOLL3_U03] The graduate, under the guidance of a mentor, is able to carry out simple tasks or research expertise typical of the biological sciences	The student, under the guidance of the instructor, performs simple tasks, such as making microscopic preparations useful in taxonomy and creating keys for species determination.	[SU5] implementation of a problem task [SU6] demonstration of practical skills [SU8] observation of student's independent or team work
Subject contents	The role and tasks of systematics. The principles of modern zoological nomenclature. An introduction to the fundamentals of phenetic, cladistic and evolutionary systematics. A review of selected groups of invertebrates, including an examination of their characteristics and systematic position, as well as the relationship between these groups and their habitats. The methods of collection, preparation and identification of material for taxonomic studies.		
Prerequisites and co-requisites	An understanding of the basic taxonomy and systematics of invertebrate animals and a familiarity with the fundamentals of invertebrate zoology are required.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	attendance	85.0%	0.0%
	test II	51.0%	33.33%
	presentation/project	51.0%	33.34%
	test I	51.0%	33.33%
Recommended reading	Basic literature 1. Literature used during the course: Boroń A., Szlachciak J. 2013. Różnorodność i taksonomia zwierząt. Tom 1. Charakterystyka i systematyka zwierząt. Uniwersytet Warmińsko-Mazurski, Olsztyn. Boroń A., Szlachciak J. 2013. Różnorodność i taksonomia zwierząt. Tom 2. Przewodnik terenowy do rozpoznawania wybranych krajowych taksonów zwierząt. Uniwersytet Warmińsko-Mazurski, Olsztyn. Winston, J. E. 1999. Describing species: practical taxonomic procedure for biologists. Columbia University Press, New York. pp. 518. 2. Literature studied independently by the student: Błaszak Cz. [red.] 2009. Zoologia. t.1. Bezkręgowce. PWN, Warszawa. Błaszak Cz. [red.] 2011. Zoologia t.2. cz.1. Stawonogi. Stawonogi. PWN, Warszawa. Błaszak Cz. [red.] 2012. Zoologia t.2. cz.2. Stawonogi. Stawonogi. PWN, Warszawa. Błaszak Cz. [red.] 2015. Zoologia t.3. cz. 1. Szkarłupnie - płazy. PWN, Warszawa.		

	Supplementary literature	Falinowski A. 2007. Techniki zbioru, utrwalania i konserwacji zwierząt. WUW, Warszawa. Giłka W., Zakrzewska M. 2013. A contribution to the systematics of Neotropical <i>Tanytarsus</i> van der Wulp: first descriptions from Ecuador (Diptera: Chironomidae: Tanytarsini). Zootaxa 3619: 453-459. Głowaciński Z. [red.]. 2007. Polska czerwona księga zwierząt. Kręgowce. PWRiL, Warszawa. Jura C. 2005. Bezkręgowce: podstawy morfologii funkcjonalnej, systematyki i filogenezy. Wydawnictwo Naukowe PWN. Kozina P., Izdebska J.N., Kowalczyk R. 2021. The first description of the nymphal stages of <i>Hoplopleura longula</i> (Psocodea: Anoplura: Hoplopleuridae) from the harvest mouse <i>Micromys minutus</i> (Rodentia: Muridae). Biodiversity Data Journal 9: e63747. Mayr E. 1974. Podstawy systematyki zwierząt. PWN, Warszawa. Moraczewski J., Riedel W., Sołyńska M., Umiński T. 1984. Ćwiczenia z zoologii bezkręgowców. PWN, Warszawa.
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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