University of Gdańsk

Subject card

Subject name and code	Information Technology - laboratory , PG_00205210						
Field of study	Oceanography						
Date of commencement of studies	October 2027		Academic year of realisation of subject	2027/2028			
Education level	Bachelor's 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	1		ECTS credits	2.0			
Learning profile	academic		Assessment form	credit			
Conducting unit	Laboratory of Physical Oceanography -> Department of Physical Oceanography and Climate Research -> Faculty of Oceanography and Geography -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor	dr Wojciech Brodziński					
	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		2.0	18.0	50	
Subject objectives	Standardize the level of knowledge among students regarding the use of basic data analysis and presentation tools. Prepare students to use basic information technologies as required by other subjects in the study program.						

Learning outcomes

Course outcome	Subject outcome	Method of verification
[OCEANL3-U11] is able to work individually and collaborate in a team, assuming various roles and performing different tasks	Performs practical tasks related to the use of information technology, following the instructions provided during the classes, utilizing worth other students the available files' and resources-sharing options.	[SU4] test/exam - oral or written
[OCEANL3-U04] is able to independently search for information in Polish and foreign specialist literature, as well as on the Internet and in databases	Familiarizes oneself with exemplary oceanographic databases and learns to search through them.	[SU4] test/exam - oral or written
[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	Learns a range of tools and techniques based on information technology that are used to analyze and present data in oceanography.	[SW4] test/exam - oral or written
[OCEANL3-K01] is willing to plan and implement, individually or as a team, the subsequent stages of the entrusted task, is willing to take responsibility for the results of these works, effectively cooperates in the team and performs various roles in it	Independently and in teams, performs practical tasks related to the use of information technology, demonstrating responsibility for the assigned elements of the task.	[SK4] test/exam - oral or written
[OCEANL3-U05] is able to use general-purpose and specialized software, as well as mathematical and statistical methods, in data analysis and the presentation of results	Uses a range of basic tools and techniques originating from information technology that are used for analyzing and presenting oceanographic data.	[SU4] test/exam - oral or written
[OCEANL3-K03] is ready to exercise caution and criticism in accepting information from scientific literature, the Internet and other media relating to natural sciences	Tests practical solutions to problems related to the use of information technology for oceanographic data analysis. Begins to use artificial intelligence methods to solve the previously mentioned problems, critically evaluating obtained results.	[SK4] test/exam - oral or written

Subject contents

Using basic office suite tools. Spreadsheets, including various methods of data visualization. Working with text editors. Tools for preparing presentations. Selecting the best methods of presenting data based on its type and using this knowledge to present information on a selected topic to a group. Fundamentals of programming using the Python language.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Test	51.0%	100.0%

Recommended reading

Basic literature

Wilson B. (1992): Information Technology: The Basics. Macmillan Publishers Limited 1992. https://doi.org/10.1007/978-1-349-12525-8

Przeździecki K., Sikorski W., Treichel W., Technologie informacyjne dla studentów, WITKOM, Warszawa, 2017 (in polish)

Wrycza S., Maślankowski J. (red.), Informatyka ekonomiczna, PWN, Warszawa 2019 (in polish)

Kawa R., Lembas J., Wstęp do informatyki, PWN, Warszawa, 2017 (in polish)

	Supplementary literature	Żarowska-Mazur A., Węglarz W. (red.), ECDL Advanced na skróty. Edycja 2015, Warszawa: Wydawnictwo Naukowe PWN, 2015 (in polish) Walkenbach J., Microsoft Excel 2016 PL. Biblia, Helion, Gliwice 2016 (in polish) Bernstein J. (2018): Computers Made Easy. From Dummy To Geek. Independently published www.python.org
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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