University of Gdańsk

Subject card

Subject name and code	ABC IT Basics - laboratory, PG_00206109						
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	1.0			
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 Aleksandra Cupiał					
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	20.0	0.0	0.0	20
	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	20		1.0	4.0	25	
Subject objectives	Introducing students to modern information technologies and how to apply them practically in analysis of Earth Science's data.						

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	Performs tasks using a wide range of exemplary oceanographic data, familiarizing oneself with a variety of techniques, research methods, and tools in the field of information technology used for environmental data analysis.	[SW2] presentation/project/paper/ report [SW5] implementation of a problem task
[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 in the field of information technology that are used to analyze and present data in Earth sciences. Works with datasets of various types and uses the best tools for their analysis and presentation.	[SU5] implementation of a problem task
[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	Develops and presents datasets as part of practical tasks distributed over time, planning subsequent steps and the final form of the project.	[SK5] implementation of a problem task
[OCEANL3-U04] is able to independently search for information in Polish and foreign specialist literature, as well as on the Internet and in databases	Using information technology and specialized software for environmental data analysis, utilizes available scientific literature databases and software technical documentation to solve occurring problems and select appropriate analytical techniques.	[SU6] demonstration of practical skills
[OCEANL3-K03] is ready to exercise caution and criticism in accepting information from scientific literature, the Internet and other media relating to natural sciences	While solving problems encountered when using information technology for processing environmental data, critically evaluates solutions available on the Internet and other media. Begins to consciously use artificial intelligence methods to solve the previously mentioned problems, critically evaluating the obtained results.	[SK5] implementation of a problem task
[OCEANL3-U11] is able to work individually and collaborate in a team, assuming various roles and performing different tasks	Performs tasks using information technology, following the instructions provided during classes.	[SU2] presentation/project/paper/ report

Subject contents

Introduction to basic tools used in the analysis and processing of oceanographic data. Demonstration of general principles of specialized software how to use its documentation. Completion of projects requiring selection of the best method for data presentation. Development of skills related to communication and teamwork, including resource sharing, email usage, and the benefits of using cloud services.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Projects and tasks undertaken during classes	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
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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