University of Gdańsk

Subject card

Subject name and code	ABC IT, PG_00044105		
Field of study	Oceanography		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2024/2025
Education level	undergraduate 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	
Conducting unit	Pracownia Oceanografii Fizycznej -> Katedra Oceanografii Fizycznej i Badań Klimatu -> Faculty of Oceanography and Geography		
Name and surname of lecturer (lecturers)	Subject supervisor	dr Gabriela Gic-Grusza	
	Teachers	dr Gabriela Gic-Grusza mgr Aleksandra Cupiał mgr Marta Misiewicz mgr Aleksandra Malecha-Łysakowska	

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						
	Additional information: If necessary, up to 15% hours can be taught online.						

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	2.0	10.0	32

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-U11	Performs tasks using information technology, following the instructions provided during classes, using available options for sharing resources with other students.	[SU1] oral statement/conversation/ discussion [SU8] observation of student's independent or team work
[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. Develops the habit of citing sources and information about the techniques used in their own work.	[SK1] oral statement/conversation/ discussion [SK5] implementation of a problem task [SK6] demonstration of practical skills
OCEANL3-W05	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-U04	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.	[SU1] oral statement/conversation/ discussion [SU6] demonstration of practical skills
OCEANL3-U05	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 [SU8] observation of student's independent or team work
[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.	[SK1] oral statement/conversation/ discussion [SK5] implementation of a problem task [SK8] observation of student's independent or team work

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 undertaken during classes and individual work	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	Podstawowe https://stackexchange.com/ - Forum with exchange of knowledge regarding issues and solutions in information technology https://www.esri.com/en-us/arcgis/products/arcgis-online/resources - A website with tutorials for spatial analysis. Adresy na platformie eNauczanie: ATC-WOiG-OCEAN-L3DZ-(2024/2025) ABC IT - Moodle ID: 12282 https://mdl.ug.edu.pl/course/view.php?id=12282
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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