University of Gdańsk

Subject card

Subject name and code	Information Technology - laboratory classes , PG_00201089						
Field of study	Marine Hydrography						
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 practical vocational preparation			
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	practical		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 Gabriela Gic-Grusza					
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	25.0	0.0	0.0	25
	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	25		2.0	23.0	50	
Subject objectives	The aim of the course is to acquire the knowledge, skills, and competencies necessary for further education in the field of study. • Basic operations on files and directories. • Office suite: principles of text editing, functions of a document editor, functions of a spreadsheet. • Fundamentals of computer graphics. • Fundamentals of GIS. • Fundamentals of programming.						

Learning outcomes

Course outcome	Subject outcome	Method of verification
[HML3-U15] is able to communicate using a variety of techniques, including non-verbal and different technical means in the professional environment and in other environments	Is able to use specialized computer software in the analysis of data and description of phenomena and processes occurring in the marine environment	[SU1] oral statement/conversation/ discussion [SU2] presentation/project/paper/ report [SU3] text preparation/written work [SU4] test/exam - oral or written [SU5] implementation of a problem task [SU6] demonstration of practical skills [SU8] observation of student's independent or team work
[HML3-U08] is able to independently use the professional literature available in traditional and electronic form, make an assessment, critical analysis and synthesis as well as the correct interpretation of the information obtained	is able to utilize source information, including archival and electronic databases, in the field of hydrographic issues, and performs critical analysis and synthesis of information	[SU1] oral statement/conversation/ discussion [SU2] presentation/project/paper/ report [SU3] text preparation/written work [SU4] test/exam - oral or written [SU5] implementation of a problem task [SU6] demonstration of practical skills [SU8] observation of student's independent or team work
[HML3-U07] is able to effectively use information and communication techniques, including utility programs to solve professional problems	is able to effectively use basic techniques, research methods, and (IT) tools used in hydrography to describe and interpret phenomena and processes occurring in the aquatic environment	[SU1] oral statement/conversation/ discussion [SU2] presentation/project/paper/ report [SU3] text preparation/written work [SU4] test/exam - oral or written [SU5] implementation of a problem task [SU6] demonstration of practical skills [SU8] observation of student's independent or team work
[HML3-W12] knows and understands, at an advanced level, the key processes occurring in the life cycle of devices, facilities, and technical systems	knows and understands at an advanced level the importance of basic techniques, research methods and IT tools used in hydrography work to describe and interpret phenomena and processes in the aquatic environment	[SW4] test/exam - oral or written [SW1] oral statement/ conversation/discussion [SW2] presentation/project/paper/ report [SW5] implementation of a problem task

Subject contents

- Basic operations on files and directories.
- Office suite: principles of text editing, functions of a document editor, functions of a spreadsheet.
- Fundamentals of computer graphics.
- Fundamentals of GIS.
- Fundamentals of programming.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
determination of the final grade based on partial grades received during the semester	51.0%	100.0%

Recommended reading

Basic literature	• Slaying the Excel Dragon: A Beginners Guide to Conquering Excels Frustrations and Making Excel Fun • Excel Basics In 30 Minutes (2nd Edition): The Quick Guide to Excel and Google Sheets
Supplementary literature	• Matthes E. (2015). Python Crash Course: A Hands-On, Project-Based Introduction to Programming. No Starch Press, 560. • Dale N., Lewis J. (2019): Computer Science Illuminated. Jones and Bartlett Publishers, Inc; 7th Revised edition
eResources addresses	

Example issues/ example questions/ tasks being completed

- Calculation tasks
- Project on data processing and visualization

Work placement

Not applicable

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