University of Gdańsk

Subject card

Subject name and code	Role and Operations of National Meteorological and Hydrological Services - lecture, PG_00201440						
Field of study	Water Management and Protection of Water Resources						
Date of commencement of studies	October 2026		Academic year of realisation of subject	2027/2028			
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	2		Language of instruction	Polish			
Semester of study	4		ECTS credits	1.0			
Learning profile	practical		Assessment form	credit			
Conducting unit	Climate Research Laboratory -> Department of Physical Oceanography and Climate Research -> Faculty of Oceanography and Geography -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		dr Janusz Filipiak				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	0.0	0.0	0.0	15
	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	15		1.0	9.0	25	
Subject objectives	To learn the main principles of the organization of the network of meteorological and hydrological measurements and observations and the functioning of the Polish National Hydrological and Meteorological Service.						

Learning outcomes

Course outcome	Subject outcome	Method of verification
[GWOZWL3-K03] The student has the ability systematic further education and professional development, updating and expand their knowledge and skills, understands the limitations of his own knowledge in the context of civilization progress and recognizes authorities in the professional and scientific environment.	P6S_KK	[SK5] implementation of a problem task
[GWOZWL3-U07] The student can use literature and other available sources of information, including information technology, multimedia, Internet, databases, and select and critically evaluate information.	P6U_U , P6S_UW	[SU5] implementation of a problem task
[GWOZWL3-U04] The student can distinguish between objectives, analyze and evaluate modern strategies for managing environment especially in the context of ecosystem approach to managing human activities in the environment with taking into account relevant law regulations and the indication of administrative bodies responsible for the management of waters and the protection of water resources.	P6U_U , P6S_UW	[SU4] test/exam - oral or written [SU5] implementation of a problem task
[GWOZWL3-W03] The student has an advanced knowledge and understanding of the organisation and legal framework of environmental protection, nature conservation and water management, as well as the principles governing the organisation and operation of hydrological and meteorological services and the fundamentals of Integrated Environmental Monitoring.	P6U_W ,P6S_WG	[SW4] test/exam - oral or written

Subject contents

A.1. Basic information on the history of meteorological and hydrological measurements and observations in Poland.
A.2 Legal basis, structure and tasks of the State Hydrological and Meteorological Service.
A.3. Organization of the system of hydrological and meteorological measurements in Poland and its basic components.
A.4. Distribution of information on meteorological and hydrological phenomena.
A.5. Representativeness of the meteorological station, homogeneity of measurement data, data quality control. Organization of measurement networks
A.6 Metadata.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
realization of the problem task	51.0%	20.0%
obtaining a passing grade on the written test in accordance with the UG Academic Regulations.	51.0%	80.0%

Recommended reading

Basic literature

A.1. used during the class
Ustawa Prawo Wodne.
WMO, 2023-2024, Guide to Meteorological Instruments and Methods of Observation, WMO No. 8, Genewa.
WMO, 2013, Guide to Global Observing System, WMO No. 488, Genewa.

A.2. studied independently by the student
Ehinger J., 1993, Siting and Exposure of Meteorological Instruments, WMO No. 589 (IOM Report No. 55), Genewa.

	Supplementary literature	IMGW, 1999, System Monitoringu i Osłony Kraju, IMGW, Warszawa. IMGW-PIB, 2014, Instrukcja dla stacji meteorologicznych, IMGW-PIB, Warszawa. WMO, 2003, Meteorological systems for hydrological purposes, WMO No. 813, Genewa. WMO, 2012, Guide to Hydrological Practices, WMO No. 168, Genewa. WMO, 2018, Guide to Climatological Practices, WMO No. 100, Genewa. WMO, 2024, Manual on WIGOS, WMO No. 1160, Genewa. WMO, 2024, Guide to WIGOS, WMO No. 1165, Genewa.
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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