

Subject card

Subject name and code	Natural and Human Milieu of the Gdansk Metropolitan Area, PG_00120744						
Field of study	Geography						
Date of commencement of studies	October 2025		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 scientific research in the field of study		
Mode of study	full-time studies		Mode of delivery		at the university		
Year of study	2		Language of instruction		English		
Semester of study	4		ECTS credits		3.0		
Learning profile	academic		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 Mirosława Malinowska				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	0.0	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		13.0		32.0	75
Subject objectives	The purpose of the course is to familiarize students with past and present processes, shaping the natural and anthropogenic environment of the Gdansk Metropolitan Area.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[GEOGRL3-W06] interactions between the natural and anthropogenic environment at different spatial and temporal scales, in particular the processes and phenomena occurring in the area of the South Baltic Coastal and Lake District and the determinants of these interactions	Interactions occurring between the natural and anthropogenic environment of the Gdansk Metropolitan Area	[SW2] presentation/project/paper/report
	[GEOGRL3-K04] social action, including cooperation to preserve the ecological balance and protect the Earth's resources and its sustainable development, using forms of own entrepreneurship for this purpose	social activities, including cooperation for the preservation of the ecological balance and protection of the resources of the Gdansk Metropolitan Area and its sustainable development, using forms of their own entrepreneurship for this purpose	[SK2] presentation/project/paper/report
	[GEOGRL3-U08] use scientific language and express themselves and discuss topics concerning geographic issues in Polish and in a foreign language	express themselves on topics related to the processes and phenomena occurring in the geographic environment of the Gdansk Metropolitan Area in English using a variety of forms, such as audiovisual	[SU2] presentation/project/paper/report
	[GEOGRL3-W03] in an advanced degree the processes and phenomena occurring in the natural environment of the Earth, with particular emphasis on the processes and phenomena occurring on the territory of Poland, especially the Coastal and South Baltic Lake Districts	in an advanced degree the processes and phenomena occurring in the past and present in the natural environment of the Gdansk Metropolitan Area and the immediate vicinity	[SW2] presentation/project/paper/report
	[GEOGRL3-W04] to an advanced degree the social, economic and political differentiation of the world, as well as the social, economic and political characteristics of countries and regions, especially northern Poland and the Pomeranian Voivodeship, understands the socio-economic transformations taking place in the modern world	to an advanced degree the social and economic differentiation of the Gdansk Metropolitan Area, understands the socio-economic transformations that have taken place in the past and today on its territory	[SW2] presentation/project/paper/report
Subject contents	[GEOGRL3-U03] use theoretical knowledge of geographic sciences and available sources of information to correctly interpret basic natural, social, economic and political processes	use theoretical knowledge of geographical sciences and available sources of information to correctly interpret the basic natural, social and economic processes and phenomena occurring in the Gdansk Metropolitan Area	[SU2] presentation/project/paper/report
	1 Introduction 2 Concepts of interaction of natural and anthropogenic environment as (eco)system 3 The concept of urban ecology 4 Historical outline of the Gdansk Metropolitan Area 5 Cultural conditions of the Gdansk Metropolitan Area 6 Unique features of the ecosystem of the Gdansk Metropolitan Area 7 Directions of environmental-anthropogenic development 8 Social responsibility in the management of the ecosystem of the Gdansk Metropolitan Area 9 The Gdansk Metropolitan Area and its location in the region. 10 The Gdansk Metropolitan Area in the lake and coastal landscape 11 The water network of the Gdansk Metropolitan Area: history and present day. 12 Floods and other extreme events in the Tri-City. 13 Water and sewage management and land reclamation in the Gdansk Metropolitan Area. 14 Climate research in former Gdansk. 15 Climate and air quality monitoring network in the Gdansk Metropolitan Area 16 Climate of the Gdansk Metropolitan Area and symptoms of its contemporary change 17 Topoclimate of selected districts of the Gdansk Metropolitan Area - factors and consequences 18 Adaptation to modern climate change in the Gdansk Metropolitan Area and mitigation of its consequences		
Prerequisites and co-requisites	English at the B+ level		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	evaluation of the referencing of the selected task	51.0%	100.0%

Recommended reading	Basic literature	Filipiak J., Miętus M., 2019. Studies of the urban climate of Gdańsk and Gdynia. <i>Acta Geographica Lodziensia</i>, 108, 21-34, doi: 10.26485/AGL/2019/108/2.(in Polish) Filipiak J., Przybylak R., Oliński P., 2019. The longest one-man weather chronicle (1721-1786) by Gottfried Reyger for Gdańsk, Poland as a source for improved understanding of past climate variability. <i>International Journal of Climatology</i>, 39, 828-842, doi: 10.1002/joc.5845. Filipiak J., Malinowska M., 2016, Selected extreme weather events on the Polish coast of the Baltic Sea in the period 2001-2014. <i>Oceanological and Hydrobiological Studies</i>. 45, 3, 405-423, doi: 10.1515/ohs-2016-0036 Owczarek M., Jakusik E., Wojtkiewicz A., Malik P., 2007, <i>Klimat Gdańska, 1981-2005</i> [in:] Miętus M., Filipiak J., Wyszowski A., 200 years of regular meteorological measurements and observations in Gdańsk, IMGW Publishing House, Warsaw, pp.160-182 (in Polish) Miejska Strategia Wodna dla Gdańska. Rotterdam: Kuiper Compagnons (2015).Jasińska E., Majewski W., 2004, Flood problems in the city of Gdańsk, [w:] Proceedings of the 37th DE FRA Flood and Coastal Management Conference, London, 1-12Majewski, W. (2008). Urban flash flood in Gdańsk 2001; solutions and measures for city flood management. <i>International Journal of River Basin Management</i>, 6(4), 357367. https://doi.org/10.1080/15715124.2008.9635363Malka, A. GIS-Based Landslide Susceptibility Modelling in Urbanized Areas: Studium przypadku Trójmiasta w Polsce. <i>GeoHazards</i> 2022, 3, 508528. https://doi.org/10.3390/geohazards3040026.Przetłumaczono z DeepL.com (wersja darmowa) Gajewski, R., & Sagan, I. (2023). Old problems - new opportunities, or the socio-economic development of Gdansk. IN C. Obracht-Prondzyński & T. Gleinert (eds.), <i>Gdańsk: the changing face of the city</i> (pp. 111-150). Gdańsk Councillors Association.Lorens, P., Gołędzinowska A., Developing Polycentricity to Shape Resilient Metropolitan Structures: the Case of the Gdansk-Gdynia-Sopot Metropolitan Area, <i>Urban Planning</i>, Vol 7, No 3 (2022).Translated with DeepL.com (free version)
	Supplementary literature	Tomczyk A.M., Owczarek M., 2019, Occurrence of strong and very strong heat stress in Poland and its circulation conditions,, <i>Theoretical and Applied Climatology</i> (2020) 139:893-905, doi.org/10.1007/s00704-019-02998-3 Owczarek M., 2007, Variability of biothermal conditions in Gdynia (1951-2005), [in:] Piotrowicz K., Twardosz R. (eds.) <i>Climate fluctuations at different spatial and temporal scales</i>, IGIgP Publishing House of the Jagiellonian University, pp. 297-305 (in Polish) Loew, Peter Oliver, ' Names of PlacesLocalities and Topographical Designations', <i>Gdańsk: Portrait of a City</i> (New York, 2024; online edn, Oxford Academic, 30 Apr. 2024), https://doi.org/10.1093/oso/9780197603864.005.0001. Soldatke, N., Sydorów, M., & Żukowska, S. (2024). Assessment of the accessibility of public transport in the Tricity (Poland): analytical use of geographical information systems (GIS) in the context of selected public transport measures. <i>International Journal of Digital Earth</i>, 17(1). https://doi.org/10.1080/17538947.2024.2344586
	eResources addresses	
Example issues/ example questions/ tasks being completed	Characterize a selected district of Gdansk, Gdynia or Sopot taking into account the natural and anthropogenic processes occurring in the district and the interactions between them.	

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