



Subject card

Subject name and code	, PG_00060043						
Field of study	Environmental Engineering						
Date of commencement of studies	February 2023			Academic year of realisation of subject		2022/2023	
Education level	second-cycle studies			Subject group		Obligatory subject group in the field of study Humanistic-social subject group 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	1			Language of instruction		Polish	
Semester of study	1			ECTS credits		3.0	
Learning profile	general academic profile			Assessment form		assessment	
Conducting unit	Department of Geotechnical and Hydraulic Engineering -> Faculty of Civil and Environmental Engineering						
Name and surname of lecturer (lecturers)	Subject supervisor			prof. dr hab. inż. Magdalena Gajewska			
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	15.0	0.0	0.0	0.0	45
	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	45		5.0		30.0	80
Subject objectives	1. Familiarizing students with various forms of the city's impact on the natural environment. 2. Presentation of exemplary problems and their solutions using modern engineering tools. Providing knowledge on the possibilities of mitigating mutual city-environment and environment-city impacts.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_K02] understands the need to formulate and communicate to the public information and opinions on the achievements in the environmental engineering and other aspects of the engineering activity in the sanitary sector; is aware of the importance and understands non-technical aspects and effects of engineering activities; strives to convey such information and opinions in a universally understandable manner, presenting various points of view	understands the need to formulate and provide the public with information and opinions on the achievements of environmental engineering and other aspects of the activities of a sanitary engineer; is aware of the importance and understands the non-technical aspects and effects of engineering activities; endeavors to convey such information and opinions in a way that is generally understandable, presenting different points of view	[SK5] Assessment of ability to solve problems that arise in practice
	K7_U11	will be able to integrate knowledge in the field of environmental engineering when formulating and solving design or research tasks, using a systemic approach, taking into account non-technical aspects (including economic and legal)	[SU5] Assessment of ability to present the results of task
	K7_W09	Has in-depth, structured, theoretically based knowledge related to: hydrology and water resources management	[SW3] Assessment of knowledge contained in written work and projects
	[K7_W02] has broadened and well-ordered knowledge of the current law on construction, water, environmental protection and planning and spatial planning.	has extensive and structured knowledge of the applicable construction, water and environmental protection regulations as well as spatial planning and development	[SW3] Assessment of knowledge contained in written work and projects
[K7_W08] has knowledge necessary to understand the social, economic, legal and other non-technical determinants of engineering activities and their incorporation in engineering practice	has the knowledge necessary to understand the social, economic, legal and other non-technical conditions of engineering activities and to take them into account in engineering practice	[SW3] Assessment of knowledge contained in written work and projects	
Subject contents	The following will be discussed: basic definitions, including the urbanized one, The future of cities - this way, the city as work, recreation, home, services: generation of waste (municipal and related to the production or provision of services), energy and water consumption (at least for social purposes), emissions gases and dusts to the atmosphere; Functions of the city, man in the urban environment - indoors and outdoors, noise, light pollution, water resources, extreme phenomena and		
Prerequisites and co-requisites	environmental chemistry		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	testr	55.0%	100.0%
Recommended reading	Basic literature	sustainable development and the functions of cities in Poland : Research on the relationship between the sustainable development of medium-sized cities in Poland and the evolution of their functional structure, Dembicka-Niemiec Agnieszka Katarzyna	
	Supplementary literature	Świat na rozdrożu Marcin Popkiewicz	
	eResources addresses	Adresy na platformie eNauczanie:	

Example issues/ example questions/ tasks being completed	What is City 15 Minutes?What does drinking urban watercourse syndrome mean?What are the differences between water and sewage management in cities and industry?Threats resulting from improper city lighting ? How dangerous is noise to humans?Jamie, there are problems in the energy management of cities?
Work placement	Not applicable