GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Environmental threats to public health, PG_00059980		
Field of study	Environmental Engineering		
Date of commencement of studies	February 2026	Academic year of realisation of subject	2026/2027
Education level	second-cycle 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	1	Language of instruction	Polish
Semester of study	2	ECTS credits	4.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of Environmental Engineering Technology -> Faculty of Civil and Environmental Engineering -> Faculties of Gdańsk University of Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	prof. dr hab. inż. Aneta Łuczkiewicz	
	Teachers		

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	30.0	0.0	30.0	0.0	0.0	60

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	60	5.0	38.0	103

Subject objectives

The subject concerns aspects of public health (including quality of life) that are determined by biological, chemical and physical environmental factors; it also covers the assessment, elimination and prevention of factors in the environment that may have a negative impact on the current and future generations.

Learning outcomes

Course outcome	Subject outcome	Method of verification
K7_U07	The student is able to plan and conduct the laboratory/field tests, leading to the assessment of the solutions implemented in environmental engineering	[SU1] Assessment of task fulfilment [SU4] Assessment of ability to use methods and tools [SU3] Assessment of ability to use knowledge gained from the subject
K7_U04	The student is able to prepare and present a presentation of carried experiment or research task; Student is able to discuss a presented results.	[SU1] Assessment of task fulfilment [SU2] Assessment of ability to analyse information [SU3] Assessment of ability to use knowledge gained from the subject [SU5] Assessment of ability to present the results of task
K7_U11	When formulating and solving design or research tasks, the student is able to integrate knowledge from the environmental engineering, supported by economic and legal aspects.	[SU1] Assessment of task fulfilment [SU2] Assessment of ability to analyse information [SU3] Assessment of ability to use knowledge gained from the subject [SU5] Assessment of ability to present the results of task
K7_W07	The student has in-depth, structured, theoretically based knowledge of municipal management, including water and wastewater treatment as well as sewage sludge processing.	[SW1] Assessment of factual knowledge [SW2] Assessment of knowledge contained in presentation

<table>
<tr><td>Subject contents</td><td>Course content – lecture
Lectures:

Discussion of contemporary threats to public health posed by biological and chemical agents. Tracking environmental pollutants figuring out where and how people are exposed. Laws and policies to reduce different types of pollution in terms of prevention of serious health problems. Analysis of emissions of antopogenic substances in terms of occurrence of environmentally caused diseases. Analysis of the possible mitigation of above-mentioned emissions. Analysis of the popularization of the knowledge in the field of environmental health and the development of positive pro-ecological attitudes in community.

Laboratory classes:

Analysis of microbiological contamination of the environment. Analysis of chemical factors shaping the microbiological quality of the environment in the context of toxicological and epidemiological threats. Climate change and resistance of bacterial strains to environmental factors in terms of biodiversity loss and the occurrence of infectious diseases.</td></tr>
<tr><td>Prerequisites and co-requisites</td><td>Podstawy zagadnień z biologii, chemii i inżynierii środowiska</td></tr>
<tr><td>Assessment methods and criteria</td><td>
<table>
<tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr>
<tr><td>lecture - test</td><td>60.0%</td><td>60.0%</td></tr>
<tr><td>laboratory - presentation</td><td>40.0%</td><td>40.0%</td></tr>
</table>
</td></tr>
<tr><td>Recommended reading</td><td>
<table>
<tr><td>Basic literature</td><td>Centers for Disease Control and Prevention: https://www.cdc.gov/nceh/tracking/tracking-intro.html

WHO: https://www.who.int/data/gho/data/themes/public-health-and-environment

Environmental Health - Healthy People 2030: https://health.gov/healthypeople/objectives-and-data/browse-objectives/environmental-health</td></tr>
<tr><td>Supplementary literature</td><td>-</td></tr>
<tr><td>eResources addresses</td><td></td></tr>
</table>
</td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td></td></tr>
<tr><td>Practical activites within the subject</td><td>Not applicable</td></tr>
</table>

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