GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Elective subject, PG_00054613						
Field of study	Spatial Development						
Date of commencement of studies	October 2021		Academic year of realisation of subject		2021/2022		
Education level	first-cycle studies		Subject group				
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		1.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Urban Design and Regional Planning -> Faculty of Architecture						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Natalia Sokół					
	Teachers	dr inż. Natalia Sokół					

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	15.0	0.0	0.0	0.0	15

E-learning hours included: 0.0

PDW- Światło (ćwiczenia) 2 sem GP - Moodle ID: 23955
https://enauczanie.pg.edu.pl/moodle/course/view.php?id=23955

Additional information:
Online teaching via Elearning platform at 4:15 p,m till 6 pm on Tuesday

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	0.0	0.0	15

Subject objectives

To familiarize students with the role and importance of daylight in shaping spaces, buildings and architectural interiors as well as the basics of creating daylight simulations in the context of design decisions made and geographical, climatic and legal conditions.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_W04] has basic knowledge in the field of pro-ecological design and knows the principles of sustainable development of cities and regions; has knowledge of the natural foundations of spatial management and the impact of natural conditions on the processes of economic development on a local, regional and national scale	Students are able to comprehend sunlight analysis results.	[SW2] Assessment of knowledge contained in presentation
[K6_U05] correctly interprets natural phenomena, and when formulating and solving engineering tasks related to spatial management, notices their systemic and non-technical aspects related to the natural environment	Students can perform simple sunlight analysis of the chosen urban area.	[SU2] Assessment of ability to analyse information [SU5] Assessment of ability to present the results of task

Subject contents

Proposed task:- preparation of an analysis of daylight in the selected building or assembly of buildings concerning:1. sunshine time 2. shadow analysis and 3. view ratings from the window

Prerequisites and co-requisites

<table>
<tr><td>Assessment methods and criteria</td><td colspan="2"><table>
<tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr>
<tr><td>presentation of analysis conclusions</td><td>60.0%</td><td>30.0%</td></tr>
<tr><td>sunlight analysis</td><td>60.0%</td><td>30.0%</td></tr>
<tr><td>presentation of the analysis and symulations results and design conclusions</td><td>60.0%</td><td>40.0%</td></tr>
</table></td></tr>
<tr><td rowspan="3">Recommended reading</td><td>Basic literature</td><td>1. Chapters 4 and 5 form Changing perspectives on daylight: Science, technology, and culture. Science/AAAS, Washington, DC, 2017.
2. Daylight: What makes the difference? Authors: M Knoop, O Stefani, B Bueno, et al, w Lighting Research & Technology, 2020
3. Neufert E., Podręcznik projektowania architektoniczno-budowlaneg o, Arkady, W-wa 1991.</td></tr>
<tr><td>Supplementary literature</td><td>1. Reinhart, Christoph. Daylighting Handbook I. 2014. ISBN: 9780692203637.
2. Lam, W. Sunlighting as Formgiver for Architecture. Van Rostrand Reinhold Company, 1986. ISBN: 9780442259419.</td></tr>
<tr><td>eResources addresses</td><td></td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td colspan="2">Prepare a simulation in any program for:1. sunshine time and 2. shadow path in a context of daylight standards.</td></tr>
<tr><td>Work placement</td><td colspan="2">Not applicable</td></tr>
</table>