GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	, PG_00065123		
Field of study	Spatial Development		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2025/2026
Education level	first-cycle studies	Subject group	
Mode of study	Full-time studies	Mode of delivery	at the university
Year of study	2	Language of instruction	Polish
Semester of study	3	ECTS credits	1.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department Of Urban Design And Regional Planning -> Faculty Of Architecture -> Wydziały Politechniki Gdańskiej		
Name and surname of lecturer (lecturers)	Subject supervisor	prof. dr hab. inż. arch. Piotr Lorens	
	Teachers	prof. dr hab. inż. arch. Piotr Lorens	

Lesson types and methods of instruction

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	0.0	0.0	15

Subject objectives

Theoretical familiarization of students with the issues of electric lighting in architecture and urban planning. It consists of lectures aimed at acquainting students with the basics of creating lighting masterplans in architecture and urban planning.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_U06] properly analyses the causes and the course of the process, and the social, cultural, political, legal and economic problems affecting changes in space, including those resulting from historical circumstances; makes design decisions based on social conditions, respecting the needs of users, the cultural environment	properly analyzes the causes and course of processes and phenomena; makes design decisions based on social conditions with respect for users' needs and the cultural environment	[SU1] Assessment of task fulfilment
[K6_W01] has knowledge related to theoretical and practical issues in the field of spatial management, the basics of planning and urban design and principles of local, regional and national development, and has basic knowledge about contemporary trends of development and revitalization of settlement structures and the life cycle of facilities and systems related to the functioning of settlement units	The student has knowledge of the history and theories of architecture related to lighting and related arts, humanities and illumination technology, enabling a critical evaluation of phenomena occurring in architecture.	[SW1] Assessment of factual knowledge

<table>
<tr><td>Subject contents</td><td>Thematic blocks

HOW CAN I UNDERSTAND LIGHT IN ARCHITECTURE?

During the classes, students will learn the basic terms related to electric lighting. Selected definitions and photometric values as well as methods of describing light in architecture will be presented.

HOW TO DESIGN ELECTRIC LIGHTING?

Then, modern techniques and principles of designing electric lighting of interiors and illumination of buildings and green areas will be introduced. During the analysis of selected lighting projects, students will learn about various methods of illuminating planes and surfaces with different textures and translucency. They learn about the stages of lighting projects and their correlation with architectural designs. The classes allow you to learn about the possibilities of shaping space with light, with particular emphasis on the reception of the external form, its illumination or the creation of "light architecture".

LAMPS

During the workshop part of the course, the latest lighting equipment, light sources and principles of shaping photometric solids will be presented.</td></tr>
<tr><td>Prerequisites and co-requisites</td><td></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>activity during classes</td><td>65.0%</td><td>35.0%</td></tr>
<tr><td>homework</td><td>65.0%</td><td>65.0%</td></tr>
</table>
</td></tr>
<tr><td>Recommended reading</td><td>
<table>
<tr><td>Basic literature</td><td>1. Innes, M. (2012) Lighting for Interior Design, Laurence King Publishing
2. The Society of Light and Lighting (SLL) Lighting Handbook P. Boyce, P. Raynham, (2009), Publisher: CIBSE
3. Żagan W., (2003), Iluminacja obiektów, Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa</td></tr>
<tr><td>Supplementary literature</td><td>1. Bartnicka M. (2003), Iluminacja artystyczna w architekturze i urbanistyce. Czynniki i wytyczne kształtowania, praca doktorska pod kierunkiem dr hab. inż. arch. Białkiewicz J. Z., prof. PK, Wydział Architektury Politechniki Krakowskiej.
2. Brandi, U., Geissmar-Brandi Ch. (2001), Lichtbuch Die Praxis der Lichtplanung, Birhauser
3. Boyce, P. (2003) Human Factors in Lighting, Taylor and Francis
4. Society of Light and Lighting SLL Code for Lighting (2012), Boyce, P., Raynham, P.Publisher: CIBSE
5. Steffy, G. Architectural Lighting Design, (2008), John Wiley & Sons Inc</td></tr>
<tr><td>eResources addresses</td><td>Adresy na platformie eNauczanie:</td></tr>
</table>
</td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td>1. Grażyna Czora mowi o akupunkturze oświetleniowej. Jak można zrozumieć to stwierdzenie w kontekście tworzenie masterplanów oświetleniowych?</td></tr>
<tr><td>Work placement</td><td>Not applicable</td></tr>
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