

SDAŃSK UNIVERSITY 的 OF TECHNOLOGY

Subject card

Subject name and code	Theory of design - problems of contemporary architecture and urbanism, PG_00057108							
Field of study	Architecture							
Date of commencement of studies	October 2022		Academic year of realisation of subject			2022/2023		
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			1.0		
Learning profile	general academic profile		Assessment form			exam		
Conducting unit	Department of Urbar	Architecture a	nd Waterscape	es -> Faculty o	f Archite	ecture		
Name and surname	Subject supervisor		prof. dr hab. inż. arch. Lucyna Nyka					
of lecturer (lecturers)	Teachers							
Lesson types and methods	Lesson type	Lecture	Tutorial	Laboratory	Projec	t	Seminar	SUM
of instruction	hours	15.0	0.0	0.0	0.0		0.0	15
	E-learning hours inclu	ided: 0.0						
Learning activity and number of study hours	Learning activity	Participation in classes includ plan	n didactic ed in study	Participation in consultation hours		Self-study		SUM
	Number of study hours	15		1.0	1.0			25
Subject objectives	The aim of the subject	t is to introduce	e students to th	ne issues of co	ntempoi	ary arc	hitecture and	urbanism
Learning outcomes	Course outcome		Subject outcome			Method of verification		
	IK/_WU3J Knows and understands the history and theory of architecture as well as art, technology and humanities to the extent necessary for the proper performance of architectural designs; advanced issues related to architecture and urban planning useful for designing architectural objects and urban complexes in the social, cultural, natural, historical, economic, legal context and other non-technical conditions of engineering activities, integrating knowledge acquired during studies					[SW1] Assessment of factual knowledge		
	the relationships between man and architecture and between architecture and the surrounding environment, and the need to adapt architecture to human needs and scale; problems of physics, technology and functions of buildings to the extent that ensures comfort of use and protection against the atmospheric factors; methods and means of implementing environmentally responsible sustainable design as well as protection and conservation of the surrounding environment		relationships between man and architecture and between architecture and the surrounding environment, and the need to adapt architecture to human needs and scale; problems of physics, technology and functions of buildings to the extent that ensures comfort of use and protection against the atmospheric factors; methods and means of implementing environmentally responsible sustainable design as well as protection and conservation of the surrounding environment			knowledge		

Subject contents	The course is offered in a form of 15 lectures and has been developed as a series of OPEN ARCH / ARCHITECTURE TALKS focused on selected topics. The lectures are given by GUT academic staff as well as by invited visiting professors from universities abroad. The participant of the course is expected to develop understanding of the contemporary architecture, its cultural, technological and environmental context, as well as responsibilities and challenges staying ahead of architects.						
Prerequisites and co-requisites	The course has no specific prerequisites						
Assessment methods Subject passing criteria knowledge		Passing threshold 50.0%	Percentage of the final grade 100.0%				
Recommended reading	Basic literature	 Shannon K., De Meulder B., d'Auria V., Gosseye J. (eds.): <i>Water urbanisms</i>. Amsterdam: SUN 2008, Dreiseitl H., Grau D. (eds.): New Waterscapes. Planning, Building and Designing with Water. Basel-Berlin-Boston: Birkhäuser 2005. Fang Ch.: Waterfront Landscapes. Hong Kong: Design Media Publishing 2011. Januchta-Szostak A. (Ed.): Water in the Townscape. Poznań: Wydawnictwo Politechniki Poznańskiej 2009. Landry Ch.: The Art of City Making. Abingdon: Routledge 2006. Nyka L.: Architecture and Water – New Concepts on Blurring Borders. W: Nyka L. (ed.): Water for urban strategies. Weimar: Verlag der Bauhaus-Universität Weimar 2007, s. 20–27. Pallasmaa J.: Hapticity and Time, notes on fragile architecture, Architectural Review 5/2000, s. 76–80. 					
	Supplementary literature	 Urbanowicz K., Nyka L.: Interactive and media architecture – from social encounters to city planning strategies. Procedia Engineering (2016), pp. 1330-1337. Elsevier Limited, Oxford, UK. DOI information: 10.1016/j.proeng.2016.08.597 Cudzik J., Nyka L.: Reasons for Implementing Movement in Kinetic Architecture. IOP Conference Series: Materials Science and Engineering, Volume 245. (cytuj: IOP Conf. Ser.: Mater. Sci. Eng. 245 042073. 2017 IOP Conference Series: Materials Science and Engineering 245 (4), 042073 					
	eResources addresses	Adresy na platformie eNauczanie:	y na platformie eNauczanie:				
Example issues/ example questions/ tasks being completed	 Transformations of post-industrial areas and objects – please describe interior and exterior cond adaptive re-use explaining urban and architectural issues. Introducing new functions in post-industrial objects – please describe the principles for creating 1 different functions and give examples. Models of transformations of post-industrial objects – please present the systematics and give e What is light pollution of the Earth's atmosphere and what can an architect / urban planner do to his/her projects not to contribute to the increase of this litter? What characteristics of light affect the perception of the designed space (mention a few and des their impact)? What is the material reflection factor in per cent and why is it so important in architecture? Give texamples of different materials and their degrees of reflection? List the advantages of algorithmic design. Name and describe types of digital fabrication. Name three objects designed with the usage of computational design techniques What is the difference between build kinetic objects. What is the difference between build kinematic buildings before and after 1990? Describe the dit in design technique and implemented types of movement. Discuss innovative/creative relations between architecture and water using two examples Basing on two examples, how modifying existing relations between architecture and we influence process of urban renewal. Buildings are designed not as static volumes but rather as arrangements of connections, a pust architecture as arrangements of connections, a results with the lower aesthetic qualities of office interiors, a discuss with this opir giving examples. That tie together separate urban areas. Illustrate your answer with sketches. That tie together separate urban areas. Illustrate your answer with sketches. 						

Work placement	Not applicable