



<b>Course name</b>	<b>Creative Modelling of Space</b>
<b>Entity running the course</b>	Faculty of Interior Architecture and Design
<b>Entity for which the course has been prepared</b>	Department of Interior Architecture
<b>Course type</b>	core / compulsory course
<b>Year of study / semester, type of studies</b>	Year I, sem. I, basic level, full-time bachelor's degree
<b>ECTS credits</b>	3 pts ECTS per semester
<b>Academic tutor</b>	Assoc. Prof. Jacek Kulig
<b>Aim of the course</b>	<ol style="list-style-type: none"><li>1. Developing sensitivity, artistic awareness and basic knowledge about composition, structure and the process of constructing an object and its performance, using various techniques and technologies allowing for free artistic expression.</li><li>2. Developing the skills of careful observation, recording, collecting, analyzing data from the 2 and 3D spaces, adaptation and use of logical phenomena of creating spaces, materials and plastics to consistently compose the 2 and 3D space, which is an important part of the designer's expression.</li><li>3. Preparation for a proper presentation and argumentation of one's choices in creative design using modern presentation tools, and information technology (sketch, drawing, photography, visualization).</li><li>4. Changing the habits from learning to conscious study.</li></ol>
<b>Prerequisites</b>	Having passed the preliminary exams guaranteeing knowledge and skills in the chosen field of study.
<b>Learning outcomes:</b>	
<b>- knowledge</b>	Student has an elementary knowledge of the development of spatial forms, the organization of the construction of the facility and its performance. Can perceive, define, record, systematize, recall and use the available design

data. Knows the concept of composition, design, processing, material and methods of organization and development of spatial forms as well as the optimal use of the opportunities available, in order to use them in the project being implemented.

**- skills**

Student has the skills to compose logically and consistently, choosing from a selection of appropriate tools for the creation and planned transfer of spatial and graphic forms in a communicative way for the recipient. Is able to identify and extract specific features of artistic and design issues related to the artistic and compositional properties of a material. Can use the acquired knowledge to find optimal solutions. Can identify and propose different ways of solving design problems. Transposes data from sketches and materials in order to seek their own solutions.

**- personal and social competence**

Student is able to make effective use of creative thinking, imagination, intuition, emotions in problem solving and presenting tasks, in form resulting from the application of information technology.

**Course content**

Introduction - General content / specificity of language, problems and tasks, issues that arise in the course of adjustment of individual and collective. Intuition, sensitivity and awareness. The plane - definitions, drawing on the plane, types and forms of drawing, geometry – concepts.  
Space - the concepts and features of the language, description of space.  
Composition - the role of composition in artistic activities and design, features of the composition examples, logic of composition and structure.  
Material - the role of the material in the activities of arts and design, definitions, examples.  
Design - the role of design in the activities of arts and design, definitions, examples.  
Plastic forms - concepts and qualities of form, language description forms, examples.  
Object - concepts definitions, two-dimensional object, three-dimensional, simple, complex.  
Tools – designer’s workshop.  
Making up - the scale and methods of prototyping.  
Experiments with materials and technologies - the role of the experiment in the next stages of work creatively-design.  
Context: spatial and spatio-historical.  
Task 1  
Interpretation of 2D objects - transformations and multiplications.  
Modeling  
Material - examples of materials, methods, and technologies processing capabilities in the context of the project.  
Greeking - making up the material, manual processing, machining, layout 3D using computer software.  
Tools - the method of use of tools during prototyping and modeling.  
The experiment - experimental modeling, layout.  
Presentation  
The argument - to prepare for the next phases of the project.  
Material - sketch, drawing, photography, visualization, model.

	<p>Tools - tools graphic (depending on the form of presentation).  Exercise 2  Family of independent objects.  Modeling  Material - examples of materials, methods, and technologies processing capabilities in the context of the project.  Greeking - making up the material, layout using 3D software, 3D printing  Tools - methods of using tools.  Experimental modeling, layout, combining processing - technological process.  Presentation  Argumentation - to prepare for subsequent phases of the project.  Material - sketch, drawing, photography, visualization, model.  Tools – graphic tools.</p>
<b>Course form and number of course hours</b>	Classes in laboratories, reviews, lectures, self-study, consultations.
<b>Assessment methods and criteria</b>	75% task execution / activity during classes / working reviews 25% open review of works
<b>Assessment type</b>	Graded pass (winter semester)
<b>Literature</b>	<p>Artheim Rudolf „Sztuka i percepcja wzrokowa -psychologia twórczego oka”;  Munken Łódź 2004  Beneyus Janine M. Biomimicry. Innovation inspired by Nature,  Frutiger Adrian „Człowiek i jego znaki,” d2d; Kraków 2010  Francuz Piotr „Obrazy w umyśle, studia nad percepcją i wyobraźnią”, WN Scholar 2007  Hensel Michael „Techniques and Technologies in Morphogenetic Design”  Królikowski Waclaw, Kłosowska-Wołkowicz Zofia, Penczek Piotr „Żywice i laminaty poliestrowe”, WNT 2007  Lefteri Chris,” Material for Inspirational Desig”  Pielichowski J., Puszyński A. „Technologia tworzyw sztucznych WNT 2003 07</p> <p>magazines  Form &amp; Function  Detail</p> <p>websites  andreagraziano.blogspot.com.tr/  artsandcomputing.wordpress.com  design technology.com  fizyka.umk.pl  fizyka.umk.pl/~duch/Wyklady/Mozg/11-swiadomosc.htm  fstoppers.com  generativeart.com  glform.com/  mat-fab.com</p>

materialconnexion.com  
neuroaesthetics.net  
sciarc.edu/  
scientific.net/  
terreform.org

**Teaching aids**

Access to professional workshop.

**Language of instruction**

Polish