



<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 II, sem. III, intermediate level, full-time bachelor's degree
<b>ECTS credits</b>	4 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. Drawing, photography, visualization, animation.</li><li>2. Developing ability to effectively use creative thinking, imagination, intuition and emotions and integrating the gained knowledge, as well as making organized choices of new activities, also in the area of teamwork.</li><li>3. Solidifying the ability to make an independent synthesis of observed phenomena occurring in a chosen context of structures, conscious transporting them and choosing adequate visual and material tools to make original and conscious expression based on correct aesthetic criteria and preparing for presentation and argumentation of one's choices in creative and design area.</li><li>4. Changing the habits from learning to conscious study.</li></ol>
<b>Prerequisites</b>	Having the first and second semester completed.
<b>Learning outcomes:</b>	
<b>- knowledge</b>	Student has a solid knowledge in the area of modelling architectural and urbanistic concepts, can recognize basic problems in the area of construction, can justify their design decisions. Student can apply their knowledge of

composition and construction, correctly recognize it, classify, localize and select as well as correctly argue their choices and decisions in design.

**- skills**

Student has the skills to compose logically and consistently on the plane and in the selection of the appropriate measures for the creation and objectify the planned transfer of spatial and graphic in a communicative way for the recipient. Student is able to identify, select, extract, transpose, invent, build and offer logical and consistent compositions 2 and 3D.

**- personal and social competence**

Student obtains competence in the area of teamwork and individual work (obtaining source information, selection, discussion and analysis of the problem). Student can listen to, present, propose, qualify, verify their position against the team. Student can ask a question when the situation requires it, can select, describe, identify, name the issues important in teamwork. Student is able to help.

**Course content**

Introduction - general content (specificity of the language problems and tasks, issues that arise in the course of adjustment of individual and collective).

Space - the concepts and features of the language description of space.

Composition - the role of composition in the activities of artistic and design features of the composition examples, the logic of composition and structure, structure.

Material - the role of the material in the activities of arts and design, definitions, examples.

The design and construction process - design, scale 1: 1 - retail, connector.

Plastic form – detail.

Object - concepts definitions.

Tools - Workshop designer.

Making up - the scale and methods of prototyping.

Thinking - the effective use of creative thinking.

Context spatial and spatio-historical.

Presentation forms of presenting the results of their work.

Task 1

Variables, 3D structure (group task) in a human scale.

Modeling

Material - methods and processing technologies, opportunities in the context of the project.

Greening - making up the material, layout using 3D software, 3D printing

Tools - methods of using tools.

The experiment - experimental modeling, layout, combining processing - technological process.

Presentation

The argument - to prepare for the election arguments subsequent phases of the project.

Material - sketch, drawing, photography, visualization, model.

Tools - tools graphics.

Exercise 2

Family objects independent (individual task) in the human scale.

Modeling

Material - methods and processing technologies, opportunities in the context

of the project.  
 Greeking - making up the material, layout using 3D software, 3D printing  
 Tools - methods of using tools.  
 The experiment - experimental modeling, layout, combining processing - technological process.  
 Presentation  
 The argument - to prepare for the election arguments subsequent phases of the project.  
 Material - sketch, drawing, photography, visualization, model.  
 Tools - tools graphics.  
 Exercise 3  
 Interpretation of 2D objects - transformations and multiplications (individual optional task).  
 Human scale.  
 Modeling  
 Material - methods and processing technologies, opportunities in the context of the project.  
 Greeking - making up the material making up the 3D using computer software, 3D printing.  
 Tools - the method of use of tools during prototyping and modeling,  
 The experiment - experimental modeling, layout, combining processing - technological process.  
 Presentation  
 The argument - to prepare for the election arguments next phases of the project.  
 Material - sketch, drawing, photography, visualization, model.  
 Tools – graphic tools (depending on the form of presentation).

**Course form and number of course hours**

Classes in laboratories, reviews, lectures, self-study, consultations.

**Assessment methods and criteria**

75% task execution / activity during classes / working reviews  
 25% open review of works

**Assessment type**

Graded pass (winter semester)

**Literature**

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 Wacław, Kłosowska-Wońkiewicz 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

magazines  
Form & Function  
Detail

websites  
[andreagraziano.blogspot.com.tr/](http://andreagraziano.blogspot.com.tr/)  
[artsandcomputing.wordpress.com](http://artsandcomputing.wordpress.com)  
[design.technology.com](http://design.technology.com)  
[fizyka.umk.pl](http://fizyka.umk.pl)  
[fizyka.umk.pl/~duch/Wyklady/Mozg/11-swiadomosc.htm](http://fizyka.umk.pl/~duch/Wyklady/Mozg/11-swiadomosc.htm)  
[fstoppers.com](http://fstoppers.com)  
[generativeart.com](http://generativeart.com)  
[glform.com/](http://glform.com/)  
[mat-fab.com](http://mat-fab.com)  
[materialconnexion.com](http://materialconnexion.com)  
[neuroaesthetics.net](http://neuroaesthetics.net)  
[sciarc.edu/](http://sciarc.edu/)  
[scientific.net/](http://scientific.net/)  
[terreform.org](http://terreform.org)

**Teaching aids**

Access to professional workshop.

**Language of instruction**

Polish