

1.	Field of study	Games and Virtual Reality Design
2.	Faculty	Faculty of Fine Arts and Educational Science
3.	Academic year of entry	2023/2024 (winter term), 2024/2025 (winter term)
4.	Level of qualifications/degree	first-cycle studies
5.	Degree profile	practical
6.	Mode of study	full-time

7.	General information about the module	
Module name		3D TECHNIQUES PART 5
Module code		W6-PG-S1-T3D.5
Number of the ECTS credits		2
Language of instruction		Polish
Purpose and description of the content of education		The student will consolidate in-depth knowledge and skills in modeling, creating textures and applying them to three-dimensional objects, and rendering three-dimensional scenes using lighting.
List of modules that must be completed before starting this module (if necessary)		not applicable

8.	Learning outcomes of the module			
Code	Description	Learning outcomes of the programme	Level of competenc (scale 1-5)	
K01	Readiness to effectively use imagination, intuition, and creative thinking to solve advanced design problems.	W6-PG1P-K01	5	
K02	Readiness to realize advanced concepts and three-dimensional projects based on a diverse style, resulting from the use of imagination, expression, and intuition.	W6-PG1P-K02 W6-PG1P-K05	5 5	
U01	Advanced ability to map and simulate the behavior of a real object in a virtual three-dimensional space.	W6-PG1P-U01	5	
U02	Ability to consciously use a set of tools for advanced creation of virtual 3D objects involving modeling, texturing, and rendering with effective lighting.	W6-PG1P-U01 W6-PG1P-U02 W6-PG1P-U03	5 5 5	
W01	Advanced knowledge of the tools and problems of creating complex 3D graphics including modeling, texturing, rendering and handling lighting.	W6-PG1P-W01 W6-PG1P-W03	5 5	
W02	Advanced knowledge of technological dependencies in the implementation of 3D projects involving optimization of objects for computer games.	W6-PG1P-W03 W6-PG1P-W06 W6-PG1P-W08	5 5 5	

9. Methods of conducting classes		
Code	Category	Name (description)
a03	Lecture methods / expository methods	Description <i>a description of objects, phenomena, processes or people; it involves specifying the structure and characteristic features of the object, phenomenon, or process being described; it is usually accompanied by a demonstration of the described object or by its models, drawings, tables, charts, etc.; a description may take the form of an explanation, classification, justification or comparison</i>
a05	Lecture methods / expository methods	Explanation/clarification <i>explication involving the derivation of a predetermined theorem from other, already known ones, in the number of steps specified by the person teaching the course</i>
c01	Demonstration methods	Exhibition <i>preparing an object for public display and displaying it in order to elicit a specific reaction; creating a themed collection of specimens/objects/works to illustrate a specific issue</i>
c07	Demonstration methods	Screen presentation <i>a presentation of synthetic image content using computer graphics, e.g., a series of slides or other multimedia forms, usually accompanied by a commentary; typical components of a screen presentation include text organized into bulleted points, charts, images and animations, sometimes sound effects or music; a multimedia illustration of course content presented in the form of a projected image</i>
d01	Programmed learning methods	Working with a computer <i>e.g., Webquest; implementation of educational tasks using electronic and digital devices, computer programs and Internet applications; the academic teacher acts as a consultant; students' work is carried out step by step according to the plan laid down by the person teaching the course and following his instructions, and proceeds towards producing the indicated results within the set deadline</i>
e02	Practical methods	Production exercise – workshop <i>an activity involving the creation of an object/product according to the rules/principles/description provided by the academic teacher acting as the workshop master</i>
e04	Practical methods	Project scheduling <i>proceeding according to the steps proposed within a specific methodology for the completion of a task; e.g., identifying project objectives, determining the result, identifying strengths, limitations, opportunities and threats (SWOT), establishing a schedule of activities, assessing resources, establishing an implementation plan; the initial diagnosis; the reassessment of assumptions; the process of preparing the practical implementation of a project</i>
e06	Practical methods	Observation <i>also conducted as fieldwork; a method of watching phenomena, objects or people in a systematic/planned way in order to gain knowledge about them; perceptual separation of elements of a model action as an element of learning through imitation; a complex system of cognition based on sensory experiences</i>
f01	Methods of self-learning	Self-education <i>a method which involves independent acquisition of knowledge, skills and social competences, extending their scope and quality; complementary to the learning process taking place in class; taking on the task of developing and adjusting qualifications on one's own; self-study</i>
f03	Methods of self-learning	Conceptual work <i>a (mainly intellectual) activity carried out independently (or in a selected group) resulting in the creation of a concept, idea or project; creating a plan based on a vision; developing a general outline of a project; producing a simplified sketch of the variant versions of a procedure/product/work</i>

<b>10. Forms of teaching</b>					
Code	Name	Number of hours	Assessment of the learning outcomes of the module	Learning outcomes of the module	Methods of conducting classes
_fs_1	practical classes	40	course work	K01, K02, U01, U02, W01, W02	a03, a05, c01, c07, d01, e02, e04, e06, f01, f03

  

<b>11. The student's work, apart from participation in classes, includes in particular:</b>				
Code	Category	Name (description)	Is it part of the BUNA?	
a01	Preparation for classes	Search for materials and review activities necessary for class participation <i>reviewing literature, documentation, tools and materials as well as the specifics of the syllabus and the range of activities indicated in it as required for full participation in classes</i>	Yes	
a02	Preparation for classes	Literature reading / analysis of source materials <i>reading the literature indicated in the syllabus; reviewing, organizing, analyzing and selecting source materials to be used in class</i>	Yes	
a03	Preparation for classes	Developing practical skills <i>activities involving the repetition, refinement and consolidation of practical skills, including those developed during previous classes or new skills necessary for the implementation of subsequent elements of the curriculum (as preparation for class participation)</i>	Yes	
a05	Preparation for classes	Production/preparation of tools, materials or documentation necessary for class participation <i>developing, preparing and assessing the usefulness of tools and materials (e.g. aids, scenarios, research tools, equipment, etc.) to be employed in class or as an aid when preparing for classes</i>	Yes	
b01	Consulting the curriculum and the organization of classes	Getting acquainted with the syllabus content <i>reading through the syllabus and getting acquainted with its content</i>	Yes	
b03	Consulting the curriculum and the organization of classes	Consulting the schedule <i>getting acquainted with the class schedule, possibly in the presence of the year tutor, in order to optimize participation in classes, including those supplementary to the core subjects listed in the pursued study programme</i>	Yes	
c01	Preparation for verification of learning outcomes	Determining the stages of task implementation contributing to the verification of learning outcomes <i>devising a task implementation strategy embracing the division of content, the range of activities, implementation time and/or the method(s) of obtaining the necessary materials and tools, etc.</i>	Yes	

Information on the details of the module implementation in a given academic year can be found in the syllabus available in the USOS system: <https://usosweb.us.edu.pl>.