

NABA

NUOVA ACCADEMIA
DI BELLE ARTI

**SUMMER
COURSES**

**3D Character
design**

3rd SESSION:
July 25th – August 4th 2023

3D CHARACTER DESIGN

School: NABA, Nuova Accademia di Belle Arti

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Course Structure: 45 hours – 9 lesson days ECTS: 3 ECTS credits*

*ECTS credits only awarded to university students or participants who are completing or have completed a university or academic study path

TITLE – AREA

3D Character design

COURSE DESCRIPTION

This course focuses on 3D softwares and GUIs, modelling techniques, UV mapping, shading and lighting. Students will learn the workflow and processes in order to build a non-destructive pipeline between softwares.

COURSE OBJECTIVES

The course has been designed to provide international students the necessary tools in order to understand 3D workflow applied to VFX, animation and game-ready pipelines.

Students will learn how to properly split and stack the workflow in different phases to obtain the best non-destructive result for different applications.

ADMISSION REQUIREMENTS

This course is intended for students who have no background in visual arts and who are attending or will attend their first year of university studies in art and design.

Basic geometry and basic animation skills (keyframes, their functions and keyframe interpolation) will be considered a plus.

It is advised to have some knowledge in

OUTPUT

At the end of the course, students will have their own turntable animation, completed with an animation-ready model, properly textured and lit.

LIST OF MATERIALS AND TOOLS to be brought by students

There is no particular requirement for materials and tools. Each student is invited to bring their own showreel (if they have any), or last work.

ATTENDANCE POLICY

Class attendance is required for successful completion of the course. Attendance will be taken every class period. Students should attend every lesson, and try to be in class at least 10 minutes before the beginning of class. On the last day of classes, instructors will issue a **Certificate of successful attendance only to all students who completed at least 80% of the course**

COURSE POLICY

The Faculty of NABA takes Academic integrity seriously. Instances of academic dishonesty such as plagiarism won't be tolerated.

Mobile phones will be kept switched off all the time during class. Use of laptop during classes for personal purposes is forbidden.

TEACHING METHODS

Learning by doing: a mix of theoretical lessons and practical workshops.

Grading

Total number of ECTS assigned for the successful completion of the course: 3 ECTS

Grading Weights		Grading Scale
1. Attendance	30 %	Excellent = 90-100
2. Participation and Creative Process	40 %	Good = 80-89
3. Final work / Final presentation	30 %	Average = 70-79
		Below Average = 60-69
TOTAL	100 %	Poor = 59 or below

	Excellent 90 -100%	Good 80 – 89%	Average 70 – 79%	Below Average 60 – 69%	Poor Below 60%
Attendance (30%)	On time, perfect attendance	Seldom late: attended between 95% and 90 % of the course	Occasionally late: attended between 90 % and 85 % of the course	Occasionally late: attended between 85% and 80% of the course	Frequently late, attended less than 80% of the course: FAILED
Participation and Creative Process (40 %)	Demonstrates strong understanding of the topic & thorough, creative research	Shows good grasp of the topic & good research	Exhibits average comprehension of the topic & average research	Shows some awareness of the topic & below average awareness of research	Has shallow insight into the topic & poor grasp of research
Original Project (Final work/ Final presentation) (30%)	Exhibits exceptional analysis of concepts & production of original proposal	Exhibits exceptional analysis of concepts & production of original proposal	Exhibits average analysis of concepts & production of original proposal	Exhibits below average analysis of concepts & production of original proposal	Exhibits poor analysis of concepts & production of original proposal

Course Schedule*

1ST WEEK

Day	Time	Professor	Lesson-subject
Day 1 Tuesday		Naba Staff	Welcome and Registration. Introduction to the course
			Introduction to CGI workflow aimed toward production: the era of the 3D artists. Basic interactions with the software Blender in order to familiarize with a 3D environment.
Day 2 Wednesday			The basics of 3D Geometry: objects, meshes, vertices. Differences between raster and vector in a 3D environment.
			Modifiers and non-destructive geometry, with exercises and examples.
Day 3 Thursday			UV mapping, why and how to correctly Unwrap geometry.
			Different types of modeling: hard surface, sculpting, generative geometry.
Day 4 Friday			Render Engines, ray-tracing vs real-time, lighting techniques.
			Shading, Materials, light paths, textures. Introduction to Node-based pipeline and procedural textures.

2ND WEEK

Day	Time	Professor	Lesson-subject
Day 5 Monday			To build a character: the importance of reference and conceptualization, IK and FK motion for animation.
			How to optimize your workflow and how to build a pipeline between softwares. Basics of physics simulations for characters (cloth, hair)
Day 6 Tuesday			Worktime: create a concept design for a character.
			Worktime: character design and development.
Day 7 Wednesday			Worktime: modeling character from reference.
Day 8 Thursday			Worktime: Rigging and posing the character. Vertex weighting, shape keys, hair grooming and simulation.
Day 9 Friday			Worktime: Lighting, Texturing, rendering of a turntable animation, optimize export for different softwares.

*The school reserves the right to:

- amend or cancel courses, change course location or substitute course leaders, professors, guests, visits location.
- make any changes that in our absolute discretion we consider necessary or appropriate for reasons of operational efficiency or due to any other circumstances that are beyond our control.