

SUMMMER COURSES

A.A. 2023-24 SYLLABUS

3D Character Design

3rd session: July 23rd – August 2nd 2024

www.naba.it



School: Nuova Accademia di Belle Arti Milano (NABA)

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Course Structure: 45 hours – 9 lesson days

ECTS: 3 ECTS credits*

Introductory level

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

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.

It is advised to have some knowledge in basic geometry and basic animation skills (keyframes, their functions and keyframe interpolation).

OUTPUT

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

Contacts



LIST OF MATERIALS AND TOOLS

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. 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, field trips and practical workshops.

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Grading

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

GRADING SYSTEM							
GRADING WEIGHTS				GRADING SCALE			
 Attendance 30% Participation and creative process 40% Final work / final presentation 30% TOTAL 100% 		Excellent = 90-100					
		EXCELLENT 90 -100%	GOOD 80 – 89°	%	AVERAGE 70 – 79%	BELOW AVERAGE 60 – 69%	POOR BELOW 60%
Atto	endance (30%)	perfect attendance 95%		m late: ded between and 90 % of ourse	Occasionally late: attended between 90 % and 85 % of the course	•	Frequently late, attended less than 80% of the course: FAILED
	rticipation and Cre- ve Process (40 %)	strong under- standing of the		topic & good	Exhibits average comprehension of the topic & average research		Has shallow insight into the topic & poor grasp of research
wo tati	ginal Project (Final rk/ Final presen- ion) 0%)	Exhibits exceptional analysis of concepts & production of original proposa	analys	sis of concep- roduction of		Exhibits below average analysis of concepts & production of original proposal	Exhibits poor analysis of concepts & production of original proposal

Contacts



1st week

COURSE SCHEDULE*				
DAY		LESSON-SUBJECT		
Day 1 - Tuesday	NABA Staff	Welcome and Registration		
		 Introduction to the course. 		
		 Introduction to CGI workflow aimed toward pro- duction: the era of the 3D artists. 		
		 Basic interactions with the software Blender in or- der 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, sculp- ting, generative geometry. 		
Day 4 - Friday		Render Engines, ray-tracing vs real-time, lighting techniques.		
		 Shading, Materials, light paths, textures. Intro- duction to Node-based pipeline and procedural textures. 		

*The Academy 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.

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2st week

COURSE SCHEDULE*	
DAY	LESSON-SUBJECT
Day 5 - Monday	To build a character: the importance of referen-
	ce 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. Ver-
	tex weighting, shape keys, hair grooming and si-
	mulation.
Day 9 - Friday	Worktime: Lighting, Texturing, rendering of a tur-
	ntable animation, optimize export for different
	softwares.
	Final Presentation.

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