

Year 2024/2025 2051220 - 3D Character Animation I

## Information about the subject

Degree: Degree in Design and Narration in Animation and Video games

Faculty: Faculty of Legal, Economic and Social Sciences

Code: 2051220 Name: 3D Character Animation I

Credits: 6,00 ECTS Year: 2 Semester: 2

Module: 3D MODELLING AND ANIMATION

Subject Matter: THREE-DIMENSIONAL ANIMATION Type: Compulsory

**Department:** Multimedia and Digital Arts

Type of learning: Classroom-based learning

Languages in which it is taught: Spanish

Lecturer/-s:



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## Module organization

### **3D MODELLING AND ANIMATION**

Subject Matter	ECTS	Subject	ECTS	Year/semester
THREE-DIMENSI ONAL MODELLING	24,00	3D Digital sculpture and character modelling I	6,00	3/1
		3D Digital sculpture and character modelling II	6,00	3/1
		3D modelling and representation I	6,00	1/1
		3D modelling and representation II	6,00	2/1
THREE-DIMENSI ONAL ANIMATION	18,00	3D Animation	6,00	2/2
		3D Character Animation I	6,00	2/2
		3D Character Animation II	6,00	3/1

## Recommended knowledge

It is essential to take the subject Character Animation I to have passed the subjects 3D Animation and Character Modeling and Digital Sculpting I

## Prerequisites



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In order to take the subject Animation in 3D, it is essential to have passed the subjects Modelling and Representation in 3D I and Modelling and Representation in 3D II.

- In order to take the subject Character Animation I it is essential to have passed the subjects 3D Animation and Character Modelling and Digital Sculpting I.
- In order to take the subject Character Animation II, it is essential to have passed the subject Character Animation I.

### \_earning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

- R1 To produce a work in which original ideas and proposals for three-dimensional animation with inorganic objects are expressed.

  R2 To apply new trends in the animation of three-dimensional organic objects.

  R3 To create the digital skeleton, articulation and dynamics of a character for subsequent animation.
- R4 To develop three-dimensional character animations following the basic principles of animation.
- R5 To make videos of character animations, adjusting export parameters (size, FPS speed, resolution, global illumination, quality, etc.).
- R6 To use the specific vocabulary of character animation acquired in the subject.
- R7 To prepare character animations developed in the subject to be included in video games.



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## Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

BASIC			Weig	hting	
		1	2	3	4
B2	Students to apply their knowledge to their job or vocation in a professional manner and to possess competences that are usually shown through the elaboration and defence of arguments and problem-solving within their area of study.				X
B5	Studens to have developed those learning skills needed to undertake subsequent studies highly autonomously.				X

GENERAL			Weighting		
		1	2	3 4	
G1	To develop original and innovative ideas and proposals in the area of design and narrative of animation and videogames in the required work in a project, combining conceptual and technical aspects.			X	
G3	To identify new trends in the field of animation and videogames and to incorporate them in their work.			X	
G5	To use a specific and inclusive vocabulary in the area of expertise of the degree.			x	

SPECI	FIC	Weighting		
		1 2 3 4		
E12	To develop (to sculp, texturize, light up, render and/or animate) organic components of the 3D scene.	x		
E19	To prepare resources analytically in two and three dimensions susceptible to be included in projects of animation and videogames.	x		



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# Assessment system for the acquisition of competencies and grading system

Assessed learning	outcomes	Granted percentage	Assessment method
R1, R2, R3, R4 R7	I, R5, R6,	40,00%	Written tests
R1, R2, R3, R4 R7	I, R5, R6,	60,00%	Elaboration of projects

#### **Observations**

#### Single assessment

According to article 9 of the General Regulations for the Evaluation and Grading of Official Courses and Own Degrees of the UCV, the continuous assessment system is the preferred assessment system at the UCV. Art. 10 allows, however, for those students who, in a justified and accredited manner, state their inability to attend in person (or to synchronous communication activities for virtual and/or hybrid teaching modalities), their extraordinary assessment in the so-called single assessment. This single assessment must be requested within the first month of each semester from the Dean's Office of the Faculty through the Vice-Deans or Master's Directors, who are responsible for the express decision on the admission of said request from the student concerned. In this subject, single assessment is not accepted as an option to pass the subject. The reason is that continuous tutoring by the teacher and face-to-face monitoring of the practices proposed in the subject are required to obtain the learning results provided for in the teaching guide.



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#### **CLASS ATTENDANCE IN FACE-TO-FACE DEGREES**

In accordance with the development guidelines of the General Regulations for the Evaluation and Qualification of Official Teachings and Own Degrees of the UCV, in face-to-face degrees, class attendance with a minimum of 80% of the sessions of each subject will be required as a requirement. to be evaluated. This means that, if a student does not attend the sessions of each subject, in a percentage greater than 20%, he/she will not be able to be evaluated, neither in the first nor in the second call, unless the person responsible for the subject, with the approval of the person responsible for degree, in view of duly justified exceptional circumstances, exempt from the minimum attendance percentage. The same criterion will be applicable for hybrid or virtual degrees in which teachers must maintain the same percentage in the requirement of "presence" in the different training activities, if any, even if these are carried out in virtual environments.

#### **MENTION OF DISTINCTION:**

The mention of "Honors" may be awarded to students who have obtained a grade equal to or greater than 9.0. Their number may not exceed five percent of the students enrolled in a group in the corresponding academic year, unless the number of students enrolled is lower.

## Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

M2 Participatory master class

M6 Project-based learning



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### **IN-CLASS LEARNING ACTIVITIES**

IN-CLASS LEARNING ACTIVITIES			
	LEARNING OUTCOMES	HOURS	ECTS
Active listening, summaries, concept maps and/or notes organizing the information and work in small groups (Kagan structures) to process the received information.  M2, M6	R1, R2, R3, R4, R5, R6, R7	20,00	0,80
The student, individually or in a group, leads their action to the elaboration of a tangible final result (product) in which process knowledges and needed competences are incorporated.  M2, M6	R1, R2, R3, R4, R5, R6, R7	40,00	1,60
TOTAL		60,00	2,40
LEARNING ACTIVITIES OF AUTONOMOUS WORK			
	LEARNING OUTCOMES	HOURS	ECTS
Autonomous work. Study, memorization, test	R1, R2, R3, R4, R5, R6, R7	30,00	1,20
preparation, practical abilities drilling, elaboration of works, essays, reflections, metacognitions, portfolios elaboration,			
M2, M6			
The student, individually or in a group, leads their action to the elaboration of a tangible final result (product) in which process knowledges and needed competences are incorporated.  M2, M6	R1, R2, R3, R4, R5, R6, R7	60,00	2,40
TOTAL		90,00	3,60



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## Description of the contents

Description of the necessary contents to acquire the learning outcomes.

### Theoretical contents:

Content block Contents

MATERIA 1 The subject presents the bases of three-dimensional

The subject presents the bases of three-dimensional animation applied to the environment of digital characters.

- Construction of the three-dimensional skeleton using joints.
- Definition of the different joints with their corresponding dynamics and parameters.
- Development of the movement cycles (walking cycle) of a character.
- Animation of gestures and postures that add personality to the model, whether organic or inorganic.
- Techniques for simplifying animation processes.

### Temporary organization of learning:

Block of content	Number of sessions	Hours
MATERIA 1	30,00	60,00

### References