Guía Docente

Information about the course

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

Faculty: Faculty of Legal, Economic and Social Sciences

Code: 2051322 **Name:** 3D Character Animation II

Credits: 6,00 ECTS **Year:** 3 **Semester:** 2

Module: MODELADO Y ANIMACIÓN EN TRES DIMENSIONES.

Subject Matter: ANIMACIÓN EN TRES DIMENSIONES **Type:** Obligatoria

Branch of knowledge:

Department: Multimedia and Digital Arts

Type of learning: Classroom-based learning

Language/-s in which it is given: Spanish

Teachers:

2053A	Santiago Garau De Meer **(Profesor responsable)**	santiago.garau@ucv.es

Module organization

MODELADO Y ANIMACIÓN EN TRES DIMENSIONES.

Subject Matter	ECTS	Subject	ECTS	Year/semester
MODELADO EN TRES DIMENSIONES	24	3D Digital sculpture and character modelling I	6	2/2
		3D Digital sculpture and character modelling II	6	3/1
		3D modelling and representation I	6	1/2
		3D modelling and representation II	6	2/1
ANIMACIÓN EN TRES DIMENSIONES	18	3D Animation	6	2/2
		3D Character Animation I	6	3/1
		3D Character Animation II	6	3/2

Recommended knowledge

It is RECOMMENDED to take the subject Character Animation II to have passed the subject Character Animation I

Other types of requirements

• Es recomendable para cursar la asignatura Animación en 3D haber superado las asignaturas Modelado y representación en 3D I y Modelado y representación en 3D II.
• Es recomendable para cursar la asignatura Animación de personajes en 3D I haber superado las asignaturas Animación en 3D y Modelado de personajes y esculpido digital en 3D I.
• Es recomendable para cursar la asignatura Animación de personajes en 3D II haber superado la asignatura Animación de personajes en   3D I.

Learning outcomes

At the end of the course, the student must demonstrate having acquired the following learning outcomes:

R15 - Produce a piece of work that demonstrates original ideas and proposals for character animation (postures and body and facial expressions). RA2.13 / RA9.24

Learning outcomes of the specified title

Type of AR: Competencias

- Correctly apply their knowledge to their work or vocation in a professional manner and be able to develop and defend arguments and solve problems within their area of study.

- Develop original and innovative ideas and proposals in the area of animation and video game design and storytelling, in the work required for a project, combining conceptual and technical aspects.

R16 - Create animated character videos, adjusting export parameters (size, FPS speed, resolution, global illumination, quality, etc.). 5.1

Learning outcomes of the specified title

Type of AR: Habilidades o Destrezas

- Demonstrate a high degree of autonomy in learning.

R17 - Cooperatively develop character animations to be included in animation and/or video game projects. 10.6

Learning outcomes of the specified title

Type of AR: Competencias

- Collaborate in teams that adopt interdisciplinary roles in the development of animation and video game projects.

R18 - Use the specific vocabulary of character animation acquired in the course. 4.13

Learning outcomes of the specified title

Type of AR: Competencias

- Be able to convey information, ideas, problems, and solutions to both specialized and non-specialized audiences.

R19 - Develop three-dimensional character animations (keyframes, joints, and inverse kinematics). 12.55

Learning outcomes of the specified title

Type of AR: Habilidades o Destrezas

- Illustrate and generate specific animation and video game projects using traditional procedures and digital techniques

R20 - Record the actual movement of people using motion capture systems and apply it to animation projects. 12.56

Learning outcomes of the specified title

Type of AR: Habilidades o Destrezas

- Illustrate and generate specific animation and video game projects using traditional procedures and digital techniques

R21 - Prepare character animations developed in the course to be included in video games, taking into account the sincere search for the full truth and the integration of all dimensions of the human being in the face of life's big questions, applying the principles derived from the concept of integral ecology and respecting and putting into practice the ethical principles and proposals for action derived from the sustainable development goals. RA12.57 / RA6.19 / RA7.19 / RA8.21

Learning outcomes of the specified title

Type of AR: Habilidades o Destrezas

- Illustrate and generate specific animation and video game projects using traditional procedures and digital techniques

Type of AR: Competencias

- Apply the principles derived from the concept of integral ecology to their proposals or actions, regardless of their scope, area of knowledge, and the contexts in which they are presented.

- Develop theoretical and practical responses based on the sincere search for the full truth and the integration of all dimensions of the human being in response to life's major questions.

- Respect and implement the ethical principles and action proposals derived from the Sustainable Development Goals, applying them to all academic and professional activities.

Assessment system

In-person modality

Assessed learning outcomes	Granted percentage	Assessment tool
R15, R16, R17, R18, R19, R20, R21	20,00%	SE1 – Written exams.
R15, R16, R17, R18, R19, R20, R21	40,00%	SE6 – Practical exams.
R15, R16, R17, R18, R19, R20, R21	40,00%	SE8 – Project development.

Observations

Continuous assessment
Attendance is compulsory for this type of assessment. In order for students to be assessed using this system, they must attend at least 80% of the face-to-face sessions.
In addition, it is essential to have completed and submitted all course activities before the final exam.
Single assessment
In accordance with Article 9 of the General Regulations for Assessment and Grading of Official Courses and UCV Degrees, single assessment is linked to the inability of students enrolled in a face-to-face degree program to attend classes. It is, therefore, an extraordinary and exceptional assessment system available to students who, for justified and accredited reasons, are unable to undergo the continuous assessment system and who request it from the professor responsible for the course, who will expressly decide on the admission of the student's request for single assessment and will notify them of its acceptance or rejection.
As far as the subject of 3D Character Animation II is concerned, the minimum attendance requirement is 80%, which is therefore the limit to be taken into consideration for any potential request for a single assessment. If granted, this will be based on the following criteria for both the first and second attempts:

·Delivery of three animation projects, detailed below:

1. Create a series of animations with the character provided, based on the fundamentals learned in body mechanics. Walking and running cycles, idle cycle, animation of the character jumping over an obstacle, animation of the character carrying a heavy object, and two short animations inspired by a video game currently on the market.

2. Create a series of animations with the character provided based on the fundamentals learned in body mechanics. The animations will focus on the Olympic disciplines of throwing (javelin, discus, shot put) and jumping (high jump, long jump, triple jump, and pole vault).

3. Create an animation of the character overcoming obstacles in a scene provided.

Use of Artificial Intelligence

In the development of the activities for this course, the use of artificial intelligence is limited solely to the creation of written texts. Under no circumstances will any practical work or project in which artificial intelligence has been used as a resource be accepted.

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.

Training activities

The methodologies to be used so that the students reach the expected learning outcomes will be the following:

M2   MD2: Interactive lecture

M4   MD4: Problem-solving exercises

M6   MD6: Project-based learning

IN-CLASS TRAINING ACTIVITIES

ACTVITY	RELATIONSHIP WITH THE COURSE LEARNING OUTCOMES	METHODOLOGY	HOURS	ECTS
AF2 – Active listening, elaboration and formulation of questions, summaries, concept maps and/or notes that organize the information received, and related work.	R15, R16, R17, R18, R19	MD2: Interactive lecture MD6: Project-based learning	9,00	0,36

AF6 – The student, individually or collectively, focuses on producing a tangible final result (product) that incorporates the knowledge and skills necessary for its realization.	R15, R16, R17, R18, R19	MD2: Interactive lecture MD6: Project-based learning	51,00	2,04
TOTAL			**60,00**	**2,40**

TRAINING ACTIVITIES OF AUTONOMOUS WORK

ACTVITY	RELATIONSHIP WITH THE COURSE LEARNING OUTCOMES	METHODOLOGY	HOURS	ECTS
AF8 – Independent work. Study, memorization, exam preparation, practice of practical skills, preparation of assignments, essays, reflections, metacognitive activities, portfolio development, etc.	R15, R16, R17, R18, R19	MD2: Interactive lecture MD4: Problem-solving exercises MD6: Project-based learning	13,00	0,52
AF6 – The student, individually or collectively, focuses on producing a tangible final result (product) that incorporates the knowledge and skills necessary for its realization.	R15, R16, R17, R18, R19	MD2: Interactive lecture MD4: Problem-solving exercises MD6: Project-based learning	77,00	3,08
TOTAL			**90,00**	**3,60**

Description of contents

Description of content necessary for the acquisition of learning outcomes.

Theoretical content:

Block of content	Contents
1st Block	The Character Animation II course is a continuation of the Character Animation I course and completes and expands knowledge in the field of character animation. ·Physics of movement in animation projects. ·Fluidity, consistency, and naturalness of characters. ·Character acting. ·Body mechanics ·Facial animation and lip-syncing techniques. ·Motion capture (MoCap) systems to bring digital characters to life and make them realistic. ·Rendering character animation according to the medium for which it is intended: web, film, television, or incorporation into a video game.

Temporary organization of learning:

Block of content	Sessions	Hours
1st Block	30	60,00

References

The animator's survival kit : [a manual of methods, principles and formulas for classical, computer, games, stop motion and internet animators] (Williams, Richard)