

Academic Year: 2025/26

201908 - 3D Infography1

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Teaching Guide Information

Subject code: 201908

Degree program: 10013 - Degree in Audiovisual Communication

Type: Compulsory

Year: 3

Number of ECTS: 6.0

Period: First term

Languages:

Interactive teaching: Group 102: Spanish

Degree coordination: Ana María González Neira

Subject coordination: Francisco Javier Taibo Pena

Faculty: Francisco Javier Taibo Pena

1. Overview

Development of 3D content for the generation of static or moving images. 3D modeling, material definition, and texture mapping.

2. Educational and learning outcomes (RD 822/2021 degree programs) or competences (RD 1393/2007 degree programs)

Competences (RD 1393/2007 degree programs)

- **[A01]** Comunicar mensaxes audiovisuais.
- **[A02]** Crear produtos audiovisuais.
- **[A03]** Xestionar proxectos audiovisuais.
- **[A04]** Investigar e analizar a comunicación audiovisual.
- **[A07]** Coñecer as técnicas de creación e produción audiovisual.
- **[A08]** Coñecer a tecnoloxía audiovisual.
- **[A11]** Coñecer as metodoloxías de investigación e análise.
- **[B02]** Que os estudantes saiban aplicar os seus coñecementos ao seu traballo ou vocación dun xeito profesional e posúan as competencias que adoitan amosarse por medio da elaboración e defensa de argumentos e a resolución de problemas dentro da súa área de estudo.
- **[B03]** Que os estudantes teñan a capacidade de reunir e interpretar os datos relevantes (normalmente dentro da súa área de estudo) para emitir xuízos que acheguen unha reflexión sobre temas relevantes de índole social, científica ou

ética

- **[B04]** Que os estudantes poidan transmitir información, ideas, problemas e solucións a un público tanto especializado como non especializado
- **[B05]** Que os estudantes desenvolvesen aquelas habilidades de aprendizaxe precisas para emprender estudos posteriores cun alto grao de autonomía
- **[B06]** Expresarse correctamente tanto de xeito oral como escrito en linguas oficiais da comunidade autónoma
- **[B08]** Empregar as ferramentas básicas das tecnoloxías da información e as comunicacións (TIC) precisas para o exercicio da súa profesión e para a aprendizaxe ao longo da súa vida.
- **[B09]** Desenvolverse para o exercicio dunha cidadanía aberta, culta, crítica, comprometida e solidaria capaz de analizar a realidade, diagnosticar problemas, formular e imprantar solución baseadas no coñecemento e orientadas ao ben común
- **[C01]** Entender a importancia da cultura emprendedora e coñecer os medios ao alcance das persoas emprendedoras.
- **[C02]** Valorar criticamente o coñecemento, a tecnoloxía e a información dispoñible para resolver os problemas cos que deben enfrontarse.
- **[C03]** Asumir como profesional e cidadán a importancia da aprendizaxe ao longo da vida.
- **[C04]** Valorar a importancia que ten a investigación, innovación e o desenvolvemento tecnolóxico no avance socioeconómico e cultural da sociedade.

2.1. Learning outcomes (RD 1393/2007 degree programs)

Learning outcomes	Study programme competences / results		
Understanding the 3D production pipeline—including workflow and naming conventions—and the professional methodology used in film, television, advertising, and video game industries.	A1 A2 A3 A4 A7 A8 A11	B2 B3 B4 B5 B6 B8 B9	C1 C2 C3 C4
Creation of 3D models for generating computer-generated imagery (CGI). Creation of texture maps tailored to those models.	A1 A2 A3 A4 A7 A8 A11	B2 B3 B4 B5 B6 B8 B9	C1 C2 C3 C4

3. Contents

Content unit	Description	Education and learning outcomes / competences	Teaching methodology and training activities	Assessment systems
Topic	Introdución: Introdución. Contexto e aplicacións. Estrutura dunha produción 3D. Fluxo de traballo para a creación de produtos audiovisuais baseados en imaxes sintéticas.	A01, A02, A03, A04, A07, A08, A11, B02, B03, B04, B05, B06, B08, B09, C01, C02, C03, C04.		SEG16, SEG30.
Topic	Modelado: Clasificación dos sistemas de modelado e representación en 3D Usos e aplicacións dos sistemas de modelado. Mallas de polígonos. Topoloxía. UVs.	A01, A02, A03, A04, A07, A08, A11, B02, B03, B04, B05, B06, B08, B09, C01, C02, C03, C04.		SEG16, SEG30.

Content unit	Description	Education and learning outcomes / competences	Teaching methodologies and training activities	Assessment systems
Topic	Materials and Textures: Definition of materials. Physically Based Rendering (PBR). Uses and applications of textures. Types of textures.	A01, A02, A03, A04, A07, A08, A11, B02, B03, B04, B05, B06, B08, B09, C01, C02, C03, C04.		SEG16, SEG30.

4. Teaching methodologies and training activities

Modality In-person					
Methodology	Description	In-person teaching hours	Virtual teaching hours	Independent study hours	Education and learning outcomes / competences
Workshop [MAG16]	Applied learning situation incorporating a range of supervised learning and testing techniques (presentation, simulation, debate, problem solving, guided practice, etc.) with a strongly practical focus.	30,00	0,00	60,00	A01, A02, A03, A04, A07, A08, A11, B02, B03, B04, B05, B06, B08, B09, C01, C02, C03, C04.
Multiple-choice questions [MAG30]	Objective test in which student is required to select one option from list of possible answers to direct question or incomplete statement provided.	2,00	0,00	0,00	A01, A02, A03, A04, A07, A08, A11, B02, B03, B04, B05, B06, B08, B09, C01, C02, C03, C04.
Guest lecture / keynote speech [MAG39]	Oral presentation complemented with the use of audiovisual aids and the introduction of some questions directed at the students, with the aim of transmitting knowledge and facilitating learning. The lecture is also known as a conference, expository method, or master class. The latter modality is usually reserved for a special type of lesson given by a professor on special occasions, with content that represents an original elaboration and is based almost exclusively on the spoken word as the means of transmitting information to the audience.	28,00	0,00	30,00	A01, A02, A03, A04, A07, A08, A11, B02, B03, B04, B05, B06, B08, B09, C01, C02, C03, C04.
Sum of hours by type		60,00	0,00	90,00	
Total hours				150,00	

5. Assessment

Modality In-person			
Assessment system	Description	Weighting (%)	Education and learning outcomes / competences
Workshop [SEG16]	Applied learning situation incorporating a range of supervised learning and testing techniques (presentation, simulation, debate, problem solving, guided practice, etc.) with a strongly practical focus.	60,00	A01, A02, A03, A04, A07, A08, A11, B02, B03,

Assessment system	Description	Weighting (%)	Education and learning outcomes / competences
			B04, B05, B06, B08, B09, C01, C02, C03, C04.
Multiple-choice questions [SEG30]	Objective test in which student is required to select one option from list of possible answers to direct question or incomplete statement provided.	40,00	A01, A02, A03, A04, A07, A08, A11, B02, B03, B04, B05, B06, B08, B09, C01, C02, C03, C04.
Total (%)		100,00	

All aspects related to academic exemption, study dedication, retention, and academic fraud will be governed in accordance with the current [academic regulations](#) of the UDC.

5.1. First opportunity

The theoretical exam will take place on the official date scheduled for the subject.

Practical assignments must be submitted within the deadlines announced in class and published in the Moodle tasks.

5.2. Second opportunity

The theoretical exam will take place on the official date scheduled for the subject.

In the second examination opportunity, the practical part of the course will be assessed through a practical test to be carried out in the lab on the official exam date. This test replaces continuous assessment, so there is no need to submit any assignments.

5.3. Early opportunity

The theoretical exam will take place on the official date scheduled for the subject.

In the early exam session, the practical part of the course will be assessed through a practical test to be carried out in the lab on the official exam date. This test replaces continuous assessment, so there is no need to submit any assignments.

5.4. Academic exemption

On May 28, 2025, the Governing Council (Consello de Goberno) approved the regulations governing the study commitment system and the academic exemption procedure for undergraduate and master's students. According to these regulations, students who are granted academic exemption have the right to request exemption from attending academic activities.

Students in this situation must contact the course instructor during the first week of class to inform them. The evaluation will be carried out as follows:

The theoretical exam will take place on the official date scheduled for the subject.

The practical part of the course will be assessed through a practical test to be carried out in the lab on the official exam date. This test replaces continuous assessment, so there is no need to submit any assignments.

6. Recommended bibliography

Basic bibliography

- Birn, Jeremy. (2014). [Digital] lighting and rendering. New Riders, 3rd edition.. Book. [\[URL\]](#)
- Brown, Tim H. (2007). The art of Maya : an introduction to 3D computer graphics. Autodesk, 4th ed.. Book. [\[URL\]](#)
- Cantor, Jeremy., Valencia, Pepe. (2004). Inspired 3D short film production. Thomson. Book. [\[URL\]](#)
- Demers, Owen. (2001). Digital texturing & painting. New Riders. Book. [\[URL\]](#)
- Kerlow, Isaac V. (2009). The art of 3D computer animation and effects. John Wiley & Sons, 4th ed.. Book. [\[URL\]](#)
- Vaughan, William C. (2018). The Pushing Points Topology Workbook. CreateSpace. Book. [\[URL\]](#)
- Vaughan, William. (2012). Digital modeling. New Riders. Book. [\[URL\]](#)
- Vaughan, William. (2012). Modelado digital. Anaya Multimedia. Book. [\[URL\]](#)
- Wissler, Virginia Bowman (2013). Illuminated Pixels : The Why, What, and How of Digital Lighting. Cengage Learning. Book. [\[URL\]](#)