UNIVERSIDADE DA CORUÑA

Academic Year: 2025/26

201911 - Multimedia Creation Tools

The English version of the teaching guide may be incomplete and/or partially translated. The teaching guide is the document that presents the academic proposal for this UDC subject. This document is public and cannot be modified, except in exceptional cases under the review of the competent authority in accordance with the current regulations that establish the process for developing guides.

Teaching Guide Information

Subject code: 201911

Degree program: 10013 - Degree in Audiovisual Communication

Type: Compulsory

Year: 3

Number of ECTS: 6.0

Period: Second term

Languages:

Lecture-based teaching:	Group 101: Spanish
Interactive teaching:	Group 101: Spanish

Degree coordination: Ana María González Neira

Subject coordination: Matías Abelardo Villanueva Sampayo

Faculty: Matías Abelardo Villanueva Sampayo

1. Overview

In recent years, we have seen the widespread use of static and interactive multimedia content within the WWW. This course teaches basic knowledge that will enable students to create multimedia material, including the creation of advertising banners, video games, and interactive content.

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

Competences (RD 1393/2007 degree programs)

- **[A02]** Crear productos audiovisuais.
- **[A07]** Coñecelas técnicas de creación e produción audiovisual.
- **[A08]** Coñecela tecnoloxía audiovisual.
- **[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.
- **[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		
Students will be able to generate multimedia applications with sound, graphics and images, which can be distributed in the form of a website.	A2 A7 A8	B8	
The student will acquire the technical skills to use multimedia creation tools to create 2D animations, motion interpolations, multimedia presentations and small games.	A2 A7		
Understand the capabilities of the technologies and methodologies learned, their alternatives, their strengths and their problems.			C2 C3 C4

3. Contents

Content unit	Description	Education and learning outcomes / competences	Teaching methodologie and training activities	Assessment systems
Topic	Introduction: Basic concepts.			
Topic	Programming Fundamentals: Source code. Programming Structures. Pseudocode, Flowcharts. Variables and Data Types. Flow Control. Program Structure. Functions.			
Topic	Animation technologies and small videogames: Creating a document. Creating accessible content. Write source code for building small videogames. Creating an interactive animation. Creating a 2D videogame.			
Topic	Basic 2D animation concepts: Working with layers. Creating a user interface with design tools. Using drawing tools. Creating symbols and instances. Adding animation and navigation with buttons. Adding static and dynamic text. Adding sound. Basic animations.			
Topic	2D Videogame-Focused Programming: Introduction to programming. Adding interactivity. Handling main events. Working with hierarchies. Randomness and collisions.			

4. Teaching methodologies and training activities

Modality In-person					
Methodology	**Description**	**In-person teaching hours**	**Virtual teaching hours**	**Independer study hours**	**Education and earning outcomes / competences**
Personalized attention [MAG00]	Monitoring of projects and practices.	10,00	0,00	0,00	
Laboratory practice [MAG21]	Creating 2D animations. Handling basic effects. Creating symbols and text types. Publishing animations. Learning interactive animation methodology. Creating 2D videogames.	20,00	0,00	45,00	A02, A07, A08, B08, C03.
Oral presentation [MAG22]	Presentations of projects.	2,00	0,00	1,00	A02, B08, C02, C04.
Objective test [MAG31]	Assessment test of theoretical and practical knowledge.	4,00	0,00	4,00	A07, A08, C02, C04.
Guest lecture / keynote speech [MAG39]	Presentation of the most theoretical topics of the subject.	14,00	0,00	5,00	A07, A08.
Supervised projects [MAG42]	Proposed projects related to the techniques used in laboratory practices.	10,00	0,00	35,00	A02, B08, 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**
Laboratory practice [SEG21]	Exercises carried out during practice classes.	20,00	A02, A07, A08, B08, C03.
Oral presentation [SEG22]	Objective test of the supervised work (including delivery of the Final Report).	20,00	A02, B08, C02, C04.
Objective test [SEG31]	Assesment test related to the knowledge acquired in the subject.	40,00	A07, A08, C02, C04.
Supervised projects [SEG42]	Works based on the knowledge acquired in the subject and carried out with teacher's supervision.	20,00	A02, B08, 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

To pass the course, it is essential to submit all laboratory exercises and the supervised work, and achieve a minimum grade of 4 out of a maximum of 10 points on both these exercises and the objective test. An oral presentation of the supervised work is mandatory.

All regulatory aspects related to "academic fraud" will be governed by the current academic regulations of the UDC.

5.2. Second opportunity

To pass the course, it is essential to submit all laboratory exercises and the supervised work, and achieve a minimum grade of 4 out of a maximum of 10 points on both these exercises and the objective test. An oral presentation of the supervised work is mandatory.

All regulatory aspects related to "academic fraud" will be governed by the current academic regulations of the UDC.

5.3. Early opportunity

To pass the course, it is essential to submit all laboratory exercises and the supervised work, and achieve a minimum grade of 4 out of a maximum of 10 points on both these exercises and the objective test. An oral presentation of the supervised work is mandatory.

All regulatory aspects related to "academic fraud" will be governed by the current academic regulations of the UDC.

5.4. Academic exemption

All regulatory aspects related to "academic exemption," "study dedication," "permanence," and "academic fraud" will be governed by the current academic regulations of the UDC.

PART-TIME STUDENTS: Should contact the subject teachers to arrange for assignments to be completed outside the normal structure of the subject.

6. Recommended bibliography

Basic bibliography

- Joyanes Aguilar, Luis. (2020). Fundamentos de programación : algoritmos, estructuras de datos y objetos. McGraw-Hill, 5ª ed.. Book. [URL]
- López Herranz, José., Quero Catalinas, Enrique. (1998). Fundamentos de programación. Paraninfo. Book. [URL]