UNIVERSIDADE DA CORUÑA

201892 - Audiovisual Computer Science

Teaching Guide Information

Subject code: 201892

Degree program: 10013 - Degree in Audiovisual Communication
10098 - Degree in Audiovisual Communication

Type: Basic Training

Year: 1

Number of ECTS: 6.0

Period: Second term

Languages:

Lecture-based teaching:	Group 101: Spanish
Interactive teaching:	Group 101: Spanish
	Group 102: Spanish
	Group 103: Spanish
Grade record:	Group 1: Pending

Degree coordination: Ana María González Neira

Subject coordination: Alfonso Castro Martínez

Faculty: José Carlos Dafonte Vázquez, María Martínez Pérez, Alfonso Castro Martínez

1. Overview

In the era of the information society and digital media of expression, creation and art are added to the field of technologies as a means of content generation, visualization support and even distribution channel.

In this sense, the personal computer becomes the key element of the author's new study. Many of the creative or transformation processes are based on its use.

The proper use and maintenance of personal computers is fundamental for the correct development of artistic possibilities. Due to ignorance or false beliefs, a machine can be underutilized, making it impossible to achieve optimum performance and frustrating the creator. In this subject we will explain basic concepts of computer science applied to a catalog of good practice and tips for tuning, as well as tools to optimize their tasks, with special attention to the use and management of the audiovisual

creator: tools for documentation and presentation of content, databases, advanced use of the Internet, multimedia digital content and its distribution, etc..

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

Knowledge
- **[C6]** Identify and assess the importance of entrepreneurial culture and recognize the means to undertake.

Skills
- **[H1]** Apply audiovisual creation and production techniques.
- **[H2]** Use information and communication technologies and the specific tools of the audiovisual field necessary for the exercise of their profession and for lifelong learning.
- **[H3]** Transmit information, ideas, problems and solutions to both specialized and non-specialized audiences, taking into account universal accessibility and design for all people.

Competences
- **[CP1]** Communicate audiovisual messages
- **[CP10]** Apply learning to undertake further studies with a high degree of autonomy.
- **[CP2]** Design and create audiovisual products.
- **[CP7]** Integrate for the exercise of an open, educated, critical, committed, democratic and supportive citizenship, capable of diagnosing problems, formulating and implementing solutions oriented to the common good.
- **[CP8]** Justify as a professional and citizen the importance of lifelong learning.
- **[CP9]** Discern and apply the available knowledge, technology and information to solve the problems to be faced in their field of study in a sustainable way.

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

Learning outcomes	Study programme competences / results		
To learn the main parts of the computer at hardware level and to know how to handle the file system (information organization).	A1 A2 A8		C3
Know how to create complex text documents	A1 A2 A3	B4 B5 B8	C3
Create spreadsheets	A1 A2 A3	B4 B5 B9	C3
Creation of presentations	A1 A2	B2 B3 B4 B5	C3
Know how to manage information in a database	A1 A2 A3	B5 B9	C3
Creation of digital media	A1 A2 A3	B5 B9	C3
Advanced use of Internet searches	A2 A4 A5 A8	B1	C3
Audiovisual information management	A3 A7 A8	B2	C2
Broadcasting of Audiovisual Products	A1 A2 A3 A4 A5 A12	B6	C1 C4

3. Contents

Content unit	Description	Education and learning outcomes / competences	Teaching methodologies and training activities	Assessment systems
Topic	Topic 1: Introduction: 1.1 Concepts and definitions 1.2 History of computer science 1.3 Digital coding of information 1.4 Digital communication of information	CP1, CP2, CP8.	MAG00, MAG21, MAG31, MAG39.	SEG31, SEG34.
Topic	Topic 2: Audiovisual hardware and devices: 2.1 Computer hardware 2.2 Operating system concepts 2.3 Communication interfaces 2.4 File systems 2.5 Audiovisual devices	H2, CP1, CP10, CP2, CP7, CP8.	MAG00, MAG31, MAG39.	SEG31.
Topic	Topic 3: Storage of audiovisual content: 3.1 Digitization concepts 3.2 Image, audio and video containers 3.3 Transformation and compression of image, audio and video. 3.4 Creation of audiovisual contents 3.5 Distribution of audiovisual content on the network.	C6, CP1, CP10, CP2, CP8.	MAG00, MAG21, MAG31, MAG34, MAG39.	SEG31, SEG34.
Topic	Topic 4: Management of audiovisual information: 4.1 Sources of Information 4.2 Tools for documentation and presentation of information contents 4.3 Network security 4.4 Searching for audiovisual content 4.5 Markup and content syndication languages 4.6 Information management and storagev	C6, H1, H2, H3, CP1, CP10, CP2, CP7, CP8, CP9.	MAG00, MAG21, MAG22, MAG31, MAG34, MAG39, MAG42.	SEG22, SEG31, SEG34, SEG42.

4. Teaching methodologies and training activities

Modality In-person					
Methodology	Description	In-person teaching hours	Virtual teaching hours	Independent study hours	Education and earning outcomes / competences
Personalized attention [MAG00]	It is considered that the students will have notable differences both in the use and in the concepts handled in this subject. For this reason, personalized attention is foreseen for classroom practices and group work.	0,00	0,00	5,00	H1, H2, CP1, CP10, CP2, CP9.
Laboratory practice [MAG21]	Basic concepts of computer science will be put into practice. Advanced concepts in information search. Creation of audiovisual material. Use of audiovisual applications. They will be developed, mainly, in a face-to-face manner by the student. Supported by institutional telematic tools such as Teams and Moodle.	11,00	0,00	10,50	H1, H2, CP2, CP8, CP9.
Oral presentation [MAG22]	Face-to-face presentation of the tutored work developed during the course.	1,00	0,00	1,00	H1, H2, H3, CP1, CP7, CP9.

Methodology	Description	In-person teaching hours	Virtual teaching hours	Independent study hours	Education and earning outcomes / competences
Objective test [MAG31]	Face-to-face written test on the concepts exposed in the lecture sessions.	2,00	0,00	3,00	CP10, CP9.
Practical test [MAG34]	Test in the laboratory for the evaluation of the acquisition of the skills taught in the practical classes. Supported by institutional telematic tools such as Teams and Moodle.	6,00	0,00	10,50	H1, H2, CP10, CP2, CP9.
Guest lecture / keynote speech [MAG39]	The theoretical concepts of the subject will be taught. Institutional telematic tools such as Teams and Moodle will be used.	28,00	0,00	45,00	H1, H2, CP1, CP10, CP8.
Supervised projects [MAG42]	Completion of a work related to audiovisual communication. It will be carried out both in classroom mode and telematically.	3,00	0,00	24,00	C6, H1, H2, CP1, CP2, CP8, CP9.
Sum of hours by type		**51,00**	**0,00**	**99,00**	
Total hours			**150,00**		

5. Assessment

Modality In-person			
Assessment system	**Description**	**Weighting (%)**	**Education and learning outcomes / competences**
Oral presentation [SEG22]	Presentation of the work developed by the small working groups.	5,00	H3, CP1, CP7, CP8, CP9.
Objective test [SEG31]	Test of knowledge of acquisition of the concepts exposed in the lecture sessions.	50,00	CP10, CP9.
Practical test [SEG34]	Test of acquisition of the competences developed in the laboratory.	40,00	H1, H2, CP10, CP2, CP9.
Supervised projects [SEG42]	Evaluation of the work developed by the different small work groups.	5,00	C6, H1, H2, CP1, CP2, CP8, CP9.
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 subject it is mandatory:

- Obtain points in the 4 parts:

1. Practical evaluations
2. Objective test of the theoretical subject
3. Quality of the tutored work
4. Presentation of the work

In order to pass the course, after calculating and adding the percentages of each part, it is mandatory to obtain a minimum of 5 out of 10 to pass the course.

For both the first and the second opportunity, the basic criteria will be the same.

The fraudulent performance of tests or evaluation activities, once proven, the measures to be taken will be governed by the UDC regulations in this regard.

NOTE: The official exam dates cannot be modified in any case (except for modifications approved by the Faculty Board).

STUDENTS WITH PART-TIME ENROLLMENT: They should contact the faculty of the course to make possible the completion of the assignments outside the usual organization of the subject.

5.2. Second opportunity

The same criteria will be applied as for the first opportunity.

5.3. Early opportunity

The same criteria will be applied as for the first opportunity.

5.4. Academic exemption

Those activities included in the UDC regulations (https://sede.udc.gal/services/electronic_board/EXP2025/005723) will be excused, **as long as the application is submitted in due time and form**.

In those activities that are dispensable, an action plan will be designed for the student that, given the motivation for the dispensation and his/her situation, will allow him/her to achieve the academic objectives set and carry out the corresponding evaluations under equal conditions and the possibility of obtaining the maximum qualification.

6. Recommended bibliography

Basic bibliography
- Elmasri, Ramez., Navathe, Shamkant B. (2007). Fundamentos de sistemas de bases de datos. Addison-Wesley, 5ª ed.. Book. [URL]
- Martín Martínez, Francisco José., Raya Cabrera, José Luis., coord. (2003). Informática básica. Ra-Ma. Book. [URL]
- Niederst Robbins, Jennifer, autor. (2018). Learning Web Design : a beginner's guide to HTML, CSS, Javascript, and Web Graphics. O'Reilly, Fifth Edition.. Book. [URL]
- Norton, Peter. (2006). Introducción a la computación. McGraw-Hill, 3ª ed.. Book. [URL]
- Plasencia López, Zoe. (2013). Introducción a la informática : edición 2013. Anaya Multimedia. Book. [URL]
- Prieto Espinosa, Alberto; Ingebook (Servicio en línea); e-libro, Corp.; Torres Cantero, Juan Carlos.; Lloris Ruiz, Antonio. (2006). Introducción a la informática. McGraw-Hill España. Book. [URL]
- Silberschatz, Abraham, Sudarshan, S.; Korth, Henry F. (2014). Fundamentos de bases de datos. McGraw-Hill, 6ª ed.. Book. [URL]
- Álvarez García, Alonso. (2018). HTML 5.2. Anaya Multimedia. Book. [URL]

7. Recommendations

In gender and equality perspective, the following guidelines will be followed:

According to the different regulations applicable to university teaching, the gender perspective must be incorporated in this subject (non-sexist language will be used, bibliography of authors of both sexes will be used, the intervention of male and female students in class will be encouraged...).

-We will work to identify and modify sexist prejudices and attitudes and will influence the environment to modify them and promote values of respect and equality.

-Situations of gender discrimination should be detected and actions and measures to correct them will be proposed.

- The hardware and software resources necessary for the realization of the different activities will be available in the laboratories of the faculty.

Emphasize that all aspects related to academic dispensation, dedication to study, permanence and academic fraud will be governed in accordance with the current academic regulations of the UDC.