

**COURSE DATA****Data Subject**

Code	33429
Name	Communication technologies II
Cycle	Grade
ECTS Credits	6.0
Academic year	2019 - 2020

Study (s)

Degree	Center	Acad. Period
1301 - Degree in Audiovisual Communication	Faculty of Philology, Translation and Communication	2 First term

Subject-matter

Degree	Subject-matter	Character
1301 - Degree in Audiovisual Communication	13 - Audiovisual technologies	Obligatory

Coordination

Name	Department
CIVERA JORGE, MIRIAM	340 - Language Theory and Communication Sciences
LOPEZ OLANO, CARLOS JAVIER	340 - Language Theory and Communication Sciences

SUMMARY

The contents of this subject have a theoretical and practical character, both complementary. The course is a continuation of Communication Technologies I, first year, and wants to consolidate and extend the knowledge acquired there. These contents include, first, the improvement in the management and use of cameras, recorders, microphones and other devices for audio-visual resources. Second, the use and benefits of the main tools for editing, post production, compositing, sound and graphics for the creation and realization of audiovisual content. Third, the implementation, management and production projects for television broadcasting, and the acquisition of skills to use appropriate technology tools in various stages of the audiovisual. Fourth, the use and handling of all tools and devices needed to capture audio-visual resources and achieve maximum performance of the main technological formats and delivery systems.



PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

Other requirements

Use of capturing devices (cameras) of video, either by hand or with a tripod, in ENG environments and study.

COMPETENCES (RD 1393/2007) // LEARNING OUTCOMES (RD 822/2021)

1301 - Degree in Audiovisual Communication

- The development of the necessary skills in the field of audiovisual communication to proceed to further postgraduate studies and professional recycling.
- Knowledge of the different languages, codes and representation methods of the different technological and audiovisual media: photography, cinema, radio, television, video and electronic image, the Internet, etc. through their aesthetic and industrial proposals and their evolution over the years, which should generate a capacity to analyse audiovisual narratives and works, taking into account iconic messages such as the texts and products of the socio-political and cultural conditions of a given historic era.
- Theoretical and practical knowledge of technologies applied to audiovisual media (photography, radio, sound, television, video, cinema, and multimedia supports), including the ability to use them in the construction and handling of the different products involved in the field of audiovisual communication.
- Knowledge of spatial imagery and iconic representations in space, both in still and moving images, as well as the elements involved in art direction. The ability to analyse and plan the relationships between images and sounds from an aesthetic and narrative viewpoint in the different audiovisual supports and technologies. The ability to apply image composition techniques and procedures to the different audiovisual supports, based on knowledge of the classical laws and aesthetic and cultural movements of the history of the image by means of the new communication technologies. It also includes knowledge of the psychological models specifically developed for visual communication and persuasion by means of the image.
- Theoretical and practical knowledge of the scientific foundations of optics and the ability to take measurements connected with the amount of light and the chromatic quality during the image construction process, both in the professional field of photography and cinematography direction and other videographic productions.
- Knowledge of sound planning and acoustic representations of space, as well as the elements involved in sound design. This knowledge will also cover the relationship between sounds and images from an aesthetic and narrative viewpoint in the different audiovisual supports and technologies. It also includes the psychological models specifically developed for sound communication and persuasion by means of sound.



- Theoretical and practical knowledge of the scientific foundations of acoustics, and the ability to take measurements connected with the quantity and quality of sound during the audio construction process, to record sound signals from any acoustic or electronic source and mix these materials for a given purpose taking into account the levels, effects and shots of the finished master mix; the ability to recreate the sound atmosphere of an audiovisual or multimedia production, reflecting the intention of the text and the narration by means of the soundtrack and sound effects.
- The ability to arrange technically the audio and visual materials to reflect an idea by using the narrative techniques and technologies necessary to create, compose, complete and master mix different audiovisual and multimedia products and to design and conceive the aesthetic and technical presentation of the mise-en-scène by means of natural or artificial sources of light and sound, taking into account the creative and expressive features proposed by the director of the audiovisual project.

LEARNING OUTCOMES (RD 1393/2007) // NO CONTENT (RD 822/2021)

Critical, robust and informed capacity for the analysis of the different types of audiovisual products today from the point of view of practice.

Group and collaborative work.

Assumption of different professional roles.

Exhibition and public defense of projects.

Critical and resolute study of audiovisual developments with Broadcast quality.

DESCRIPTION OF CONTENTS

1. Camera improvement.

Using the ENG camera menu. Different possibilities of time codes: Free Run, and Rec Run. Power Phantom microphones. Input MIC and LINE audio signals.

2. Lighting.

3-point basic lighting explanation: Main, fill, Backlight.

**3. News edition.**

Types of news attending to its form. Routine of edition in audiovisual news. The structure: schema, dump, locution. Logical editing sequence. The Script.

4. Video Editing I.

Analog and computer. Nonlinear system features: Randomness, virtual edition, system nonlinearity, compatibility, quality. Edition software. Most popular systems: professionals and amateurs. Examples: Final Cut, Avid, Media 100, Premiere. Bins, clips, folders, viewing of clips. Interface, presentation workspaces: Default or custom styles. The timeline. Navigate the timeline. Editor resources and techniques to streamline assembly operations. Create ranges. Select tracks. Muting tracks.

5. Video Editing II.

Nonlinear edition: Clip, Bin and project. Browser, Viewer, Timeline, Canvas, vumeter. Tools. Adobe Premiere edition: Particularities.

6. New technologies in emission.

The transition from analog to digital. Broadcast formats: Cable, Satellite and terrestrial. Digital formats, DVB, ATSC, ISDB. High Definition. The future of television and film.

WORKLOAD

ACTIVITY	Hours	% To be attended
Laboratory practices	60,00	100
Attendance at events and external activities	5,00	0
Development of group work	10,00	0
Development of individual work	10,00	0
Study and independent work	15,00	0
Readings supplementary material	10,00	0
Preparation of evaluation activities	15,00	0
Preparing lectures	5,00	0
Preparation of practical classes and problem	20,00	0
TOTAL	150,00	



TEACHING METHODOLOGY

The general working methodology proposed in the subject of Communication Technologies II is based on regular assistance to the classroom-workshop, where the theoretical and explanatory basis of the subject will be given. Then, in the practical application of the acquired knowledge, through the handling of audiovisual material, both cameras, tripods, microphones, lighting, and non-linear and post-production editing equipment. In order to acquire skills in the handling of the devices, it will be proposed to carry out practical work, always directed by the teacher, that serve as an excuse for the acquisition of the technical skills necessary to be able to express themselves audiovisually. The exercises will also serve to get used to the division of work and the team collaboration necessary for television work.

EVALUATION

The evaluation of the course is based on two principles:

- a) assessment of theoretical knowledge as agenda of all matters relating to operations and technical knowledge of audiovisual equipment proposed by a theoretical test.
- b) knowledge, use and development of tools, applications and equipment available at the workshop Broadcast Audiovisual through the actual development of an audiovisual project teams.

Note:

The final assessment will result from passing a written test that assesses both the theoretical and practical knowledge acquired during the exercises performed in class by students.

REFERENCES

Basic

- MARTÍNEZ ABADÍA, J. ET ALII: Manual básico de tecnología audiovisual y técnicas de creación.. Paidós, Barcelona, 2004
- MARTINEZ ABADIA, J.: Introducción a la Tecnología Audiovisual. Paidós, Barcelona, ed. revisada 1997
- LLORENS, V.: Fundamentos tecnológicos de vídeo y televisión. Paidós, Barcelona, 1995
- Manual de cámara Panasonic AG-HVX201AE
- Manual Básico Final Cut Pro Cursos GUM, Madrid <http://www.escuelacine.com/adobe-premiere/>--
- FERNÁNDEZ DÍEZ, F. I MARTÍNEZ ABADÍA, J.: Manual básico de lenguaje y narrativa audiovisual. Barcelona, Paidós.
- OHANIAN, T.: Edición digital no lineal. Madrid IORTV. 2001



MILLERSON, G.: Iluminación para televisión y cine. Madrid, IORTV, 1994.

Additional

- Arijón, D. (1988). Gramática del lenguaje audiovisual. Escuela de Cine y Vídeo. San Sebastián.
- Barroso, J. (1986). "Lenguaje y Realización en la Televisión y el Vídeo", en Telos nº 9, Fundesco, Madrid.
- Barroso, J. (1994). Técnicas de realización de reportajes y documentales para televisión, Madrid, IORTV.
- Bou-Bouzà, G. (1997). El guión multimedia. Madrid: Anaya.
- Bounford, T. (2000). Diagramas digitales. Gustavo Gili. Barcelona
- Castillo, J. M. (2014). Elementos del lenguaje audiovisual en televisión, IORTV, UD 155.
- Cebrian, M. (1978). Introducción al lenguaje de la televisión. Una perspectiva semiótica, Madrid, Pirámide.
- Chion, M. (1993). La audiovisión. Introducción a un análisis conjunto de la imagen y el sonido, Barcelona, Paidós.

ADDENDUM COVID-19

This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council

English version is not available