

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

<b>Code</b>	36575
<b>Name</b>	Communication technologies I
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	6.0
<b>Academic year</b>	2022 - 2023

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
1333 - Degree in Audiovisual Communication	Faculty of Philology, Translation and Communication	1	First term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1333 - Degree in Audiovisual Communication	10 - Tecnologías de los medios audiovisuales	Obligatory

**Coordination**

<b>Name</b>	<b>Department</b>
HUGUET CLEMENTE, MARIA CARMEN	340 - Language Theory and Communication Sciences
RAUSELL LLEDO, IGNACIO	340 - Language Theory and Communication Sciences

**SUMMARY**

Acquisition of theoretical and practical knowledge of audiovisual capture technologies. Training, use and handling of cameras, video recorders, microphones and other devices for capturing audiovisual resources, as well as knowledge and performance of the main technological formats and broadcasting systems. The contents of this subject have a theoretical and practical character, both complementary. These contents are mainly focused on the proper use and operation of cameras, microphones and basic lighting.



## PREVIOUS KNOWLEDGE

### Relationship to other subjects of the same degree

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

### Other requirements

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

## OUTCOMES

### 1333 - Degree in Audiovisual Communication

- Students must have acquired knowledge and understanding in a specific field of study, on the basis of general secondary education and at a level that includes mainly knowledge drawn from advanced textbooks, but also some cutting-edge knowledge in their field of study.
- Students must have developed the learning skills needed to undertake further study with a high degree of autonomy.
- Students should be able to work as a team, communicate their own ideas and integrate themselves into group projects aimed at achieving results.
- Students should have the capacity and creativity to take expressive and thematic risks within the availability and time constraints of the communicative production, applying solutions and perspectives based on the development of the projects.
- Students should be able to adapt to technological and socio-occupational changes.
- Students should be able to obtain and select relevant information and sources in order to solve problems and elaborate on strategies.
- Students should possess the ability to organise and plan their tasks, performing them in an orderly manner and prioritising the journalistic processes in a logical manner.
- Students should show solidarity with people across the planet, as well as knowledge of the main cultural currents in relation to individual and collective values and respect for human life.
- Students should be able to search for, select, read, interpret and analyse both written and audiovisual texts and documents (analytically, synthetically and critically).
- Students should have initiative, creativity, credibility, honesty, leadership spirit and responsibility, both personally and professionally.
- Students should be able to experiment and innovate through the understanding and use of the applied methods and technologies.
- Conocimiento teórico-práctico de las tecnologías aplicadas a los medios de comunicación audiovisuales (fotografía, radio, sonido, televisión, vídeo, cine, y soportes multimedia), incluyendo la capacidad para utilizarlos en la construcción y manipulación de los diversos productos que abarca el ámbito de la comunicación audiovisual.



- Students should have both a theoretical and practical understanding of the scientific fundamentals of optics and the ability to process measurements in relation to the amount of light and chromatic quality during the construction of images, both in the professional field of photography and in the direction of photography for film and other video-graphic productions.

## LEARNING OUTCOMES

- Measure light in image capture processes.
- Adjust the color in image editing processes.
- Build the chromatic and light texture of images in visual and audiovisual productions.
- Apply the techniques and processes of audiovisual production and dissemination in its various phases.
- Plan human resources.
- Manage the technologies applied to the media.
- Know the codes and modes of representation typical of audiovisual communication.
- Identify the social, cultural and historical relevance of the aesthetic proposals of the audiovisual industries.
- Carry out analysis of stories and audiovisual works.
- Order sound and visual materials in relation to a narrative.
- Compose an audiovisual and/or multimedia master's degree.

## DESCRIPTION OF CONTENTS

### 1. Fundamentals of capturing the image. The digital video camera

Introduction to the process and workflow of an audiovisual project: operating phases at TAU workspace.

Visual and photographic composition

Basic photography concepts: types of optics and objectives. ISO, aperture, shutter speed, color temperature. Focal length, depth of field and focus.

JPEG and RAW

Introduction to the management of digital video cameras: typology of cameras and management of tripods.

Video levels and settings: White Balance, Gain, Digital Formats / Compatibility.

Interlaced video vs. progressive video.

Recording formats and camera resolution. Transferring archives, formats, codecs and compression.



## **2. Audiovisual language grammar**

Shots: types of shots according to scale and according to angulation

Composition of the shot or frame

Time: transitions, flashback, flasdfoward, ellipsis.

Stages in the creation of videos

Audiovisual narrative: the scene, the sequence, the filmic space

The continuity or raccord

Making news: voice-overs, resources and interviews

## **3. Lighting basics**

General concepts of light. Concepts Low Key and High Key.

Types of light

Properties of light

Color temperature

Materials and lighting equipment. Some types of spotlights.

Filters and accessories.

Basic lighting schemes.

Applied lighting: Lighting designs for different formats: Interviews, informative, objects, etc.

## **4. Professional audio**

Sound physics. The audio and its characteristics

Basic classification of microphones

Some micros models

Audio connectors

Voice over. Idioms

Basics of Sound Design

Types of sound in audiovisual narrative

Lossless audio formats and formats with loss of quality

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Laboratory practices	45,00	100
Theory classes	15,00	100
Development of group work	45,00	0
Study and independent work	45,00	0
<b>TOTAL</b>	<b>150,00</b>	

**TEACHING METHODOLOGY**

Master lesson.

Resolution of theoretical-practical problems.

Study and analysis of cases.

Presentation in the classroom and group work.

The general work methodology proposed in the subject of communication technologies is based on the attendance in the classroom-workshop, in the personal and group work, in the study of the theoretical material of the subject based on the bibliography and the audiovisual material. The realization of projects in class is proposed as an expression and practice of the competences acquired by the student. The projects to be carried out in class are (recording for a later edition in the Asignatura II communication technologies in the next semester):

1. Scales of plans and camera movements: exercises on stage types: lighting by fictional scene; Narrative composition; Non-fiction composition; Lighting for informational...
2. Sequence with raccord
3. News contents
4. Free style

**EVALUATION**

The evaluation of the subject will be based on two principles: a) Assessment of the theoretical base knowledge according to the syllabus, of everything related to the technical knowledge and operations of the audiovisual equipment proposed by means of a theoretical test. b) Knowledge, use and development of the tools and equipment available in the Audiovisual Workshop, through the actual development of audiovisual projects by teams.

The evaluation will be done as a result of: 1. Final written test (30%). 2. Assessment of individual technical learning (20%) 3. Assessment of technical learning in audiovisual projects carried out in class (50%)

Important: To be able to evaluate it is necessary to have attended 80% of the sessions. In the practical classes at the TAU there will be a roll call. Note: To pass the course it is essential to have passed all parts.





## REFERENCES

### Basic

- CARLSON Sylvia y CARLSON, Verne (2003). Manual profesional de cámara. IORTV: Madrid,
- CASTILLO, José María (2010). Televisión, realización y lenguaje audiovisual. IORTV: Madrid,
- CHION, Michel (1993). La audiovisión: introducción a un análisis conjunto de la imagen y el sonido. Barcelona: Paidós.
- FERNÁNDEZ DÍEZ, Federico y MARTÍNEZ ABADÍA, José (1999). Manual básico de lenguaje y narrativa audiovisual. Paidós: Barcelona.
- López Olano, Carlos (2015), Tecnologías de la Comunicación I. Valencia: Tirant lo Blanch.
- Marzal, Javier y Francisco López (coord.) (2008). Teoría y técnica de la producción audiovisual, Valencia: Tirant lo Blanch.
- MILLERSON, Gerald (2000). La iluminación en televisión. IORTV: Madrid: 2000.
- RABIGER, Michael (2001). Dirección de cine y video. IORTV: Madrid.
- THOM, Randy (2013). Escribiendo un guión para el sonido. Palabra Clave, 16(3), 995-1008. <https://revistas.unisabana.edu.co/index.php/palabraclave/article/view/3611>
- THOMPSON, Roy (2002). El lenguaje del plano. IORTV: Madrid.
- TORÁN, Enrique (1998). Tecnología audiovisual. Síntesis: Madrid.
- VERNON, Kathleen M. (2016). El sonido cinematográfico. Hispanofila, 177. <https://link.gale.com/apps/doc/A502652766/AONE?u=univ&sid=bookmark-AONE&xid=f83f5155>

### Additional

- ARREDONDO, Herminia, and Francisco J. GARCÍA (1998). Los sonidos del cine. Comunicar, 11.
- HOLMAN, Tomlinson (2010). Sound for Film and Television. Burlington: Routledge.
- JULLIER, Laurent (2007). El sonido en el cine: imagen y sonido: un matrimonio de conveniencia. Puesta en escena/sonorización. La revolución digital. Barcelona: Paidós.
- KATZ, Steven (2000). Plano a plano. Plot: Madrid.
- VILLAIN, Dominique (1997). El encuadre cinematográfico. Paidós Comunicación: Barcelona.