COURSE DATA

DATA SUBJECT

Code: 36575
Name: Communication technologies I
Cycle: Undergraduate Studies
ECTS Credits: 6
Academic year: 2026-27

STUDY (S)

Degree	Center	Acad. year	Period
1333 - Degree in Audiovisual Communication	Facultat de Filologia, Traducció i Comunicació	1	First quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1333 - Degree in Audiovisual Communication	Tecnologías de los medios audiovisuales	COMPULSORY

COORDINATION

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SUMMARY

Communication Technologies I is a compulsory course of the Degree in Audiovisual Communication that is part of the subject Audiovisual Media Technology.

Acquisition of theoretical and practical knowledge of audiovisual capture technologies. Training, use and management of cameras, tape recorders, microphones and other devices for capturing audiovisual resources; as well as the knowledge and benefits of the main technological formats and broadcast 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

No other types of requirements are considered.

COMPETENCES / LEARNING OUTCOMES

1333 - Degree in Audiovisual Communication

Capacidad para realizar la ordenación técnica de los materiales sonoros y visuales conforme a una idea utilizando las técnicas narrativas y las tecnologías necesarias para la elaboración, composición, acabado y masterización de diferentes productos audiovisuales y multimedia y para diseñar y concebir la presentación estética y técnica de la puesta en escena a través de las fuentes
lumínicas y acústicas naturales o artificiales, atendiendo a las características creativas y expresivas que propone el director del proyecto audiovisual.

Students must have developed the learning skills needed to undertake further study with a high degree of autonomy.

Students must have the ability to gather and interpret relevant data (usually in their field of study) to make judgements that take relevant social, scientific or ethical issues into consideration.

Students should be able to adapt to technological and socio-occupational changes.

Students should be able to defend a culture of peace and respect for the fundamental human rights within the processes of communication, specifically in regards to equality between women and men in all types of communication (informative, interpretative, semiotic, dialogic and opinion).

Students should be able to experiment and innovate through the understanding and use of the applied methods and technologies.

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 be able to understand and apply the techniques and processes of audiovisual production and transmission in the different phases, from the conception of a project until its commercialisation. This knowledge will lead to the development of the ability to plan and manage human resources, budget and technological resources, including all the processes involved in the management of audiovisual companies in their various fields.

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 an understanding of the different languages, codes and modes of representation used in the different technological and audiovisual mediums such as photography, cinema, radio, television, electronic image and video, internet etc., through their own individual industries and aesthetics, as well as through the evolution of their social and cultural relevance through time. This should generate the ability to analyse stories and audiovisual works, considering the iconic messages of the texts as products of the social, political and cultural conditions in which they were produced.

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.

Students should have initiative, creativity, credibility, honesty, leadership spirit and responsibility, both personally and professionally.

Students should have the capacity and creativity necessary to take expressive and thematic risks within the scope and timeframes of communicative production, applying well-founded solutions and perspectives to the development of projects.

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.

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.

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.

DESCRIPTION OF CONTENTS

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

- Introduction to the process and workflow of an audiovisual project: phases and operation of the TAU workspace.
- Visual and Photographic Composition.
- Basic photography concepts applied to film and video: types of optics and lenses. ISO, aperture, shutter speed, color temperature. Focal length, depth of field, and focus.
- Introduction to using digital video cameras: camera types and tripod handling.
- Video levels and settings: white balance, gain, digital formats/compatibility.
- Interlaced video vs. progressive video.
- Recording formats and camera resolution. Dumping, formats, codecs, and compression.

2. Audiovisual language grammar

- The Shot: types of shots according to scale and angle.
- Camera movements.
- Shot composition or framing: law of gaze and air.

- Time: transitions, punctuation elements, ellipsis.
- Audiovisual narrative: scene, sequence, film space.
- Continuity or raccord and the 180-degree rule.
- News production: voiceover, resources, and interviews.

3. Lighting basics

- General concepts of light.
- Types of light.
- Properties of light.
- Color temperature.
- Lighting materials and equipment. Some types of spotlights.
- Filters and accessories.
- Basic 3-point lighting

4. Professional audio

- Basic microphone classification.
- Some microphone models.
- Audio connectors.
- Voice-overs. Locutions.
- Basic fundamentals of sound design.
- Types of sound in audiovisual narrative.
- Lossy and lossless audio formats.

Learning outcomes

This contents will be reflected in the following learning outcomes:

- Measure light in image capture processes.
- Apply audiovisual production and distribution techniques and processes in their various phases.
- Plan human resources.
- Manage technologies applied to media.
- Understand the codes and modes of representation specific to audiovisual communication.
- Adapt a staging to the creative and expressive characteristics of an audiovisual story.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	15,00

Laboratory	45,00
Total hours	**60,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	40,00
Independent study and work	50,00
Preparation of lessons	0,00
Preparation for assessment activities	0,00
Resolution of case studies	0,00
Total hours	**90,00**

TEACHING METHODOLOGY

Presencial activities

In-person teaching will follow the following methodologies:

- **Lecture.** In-class explanation of the theoretical and practical content of the course.
- **Classroom presentation and group work.** The creation of audiovisual projects in class is proposed as an expression and practice of the skills acquired by students. The projects to be carried out in class (recorded for later editing in the Communication Technologies II course, in the following semester) are: 1. Shot scale and camera movements; 2. Sequence with Continuity or Raccord; 3. Interview dialogue in a shot versus a fake shot live on set; 4. News report; 5. Narrative video for social media dissemination

Non presencial activities

Students will complete the following **non-classroom activities:**

- **Preparation of individual or group work:** development of the process corresponding to the practical work.
  Study and independent work: specific preparation for the final exam (including any consultations and tutorials required by the student).

Educational innovation

This course is part of the educational innovation project PIEC-3896297 "ElMur. Memory and multi-telling" and follows the activities approved by the Service for Continuing Education and Innovation (SFPIE), among which the following stand out: disseminating democratic memory among students and channeling the effort involved in class work toward understanding these topics. This is all within the model known as Project-Based Learning (PBL), with the (always voluntary) proposal to participate in the topic of Historical Memory.

Sustainable Development Goals

This course specifically addresses the following Sustainable Development Goals:

- **SDG 4, Quality Education.** Target 7, that students acquire the theoretical and practical knowledge necessary to promote sustainable development, human rights, gender equality, the promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity, and the contribution of culture to sustainable development.
- **SDG 5, Gender Equality.** Target 1, end all forms of discrimination against all women and girls everywhere.

EVALUATION

The general qualification system will follow the Regulations for evaluation and qualification of the University of Valencia for bachelor's and master's degrees, approved by the Government Council on May 30, 2017 (ACGUV 108/2017).

Assessment in the first examination period

The evaluation in the first call will be in the following mode:

- **Final written exam (50%).** Written exam on the theoretical-practical themary of the subject. It is required to obtain at least a 5 out of 10 in order to be able to complete the assessment of the practices. It is recoverable in the second call.
- **Assessment of technical learning (50%).** Through the assessment of the different laboratory practices carried out during the course. It is recoverable in the second call.

Class attendance is mandatory, in most cases 80% of the sessions of the laboratory group.

Assessment in the second examination period

The assessment in the second examination period will maintain, if applicable, the grades obtained in the blocks passed in the first examination period. The evaluation of the blocks failed or not presented will be carried out in the following way:

- **Final written exam (50%).** Written exam on the theoretical and practical content of the subject. A grade of at least 5 out of 10 is required to calculate the average for the practical assessment.
- **Assessment of technical learning (50%).** This will be achieved through a practical exam that assesses the student's knowledge of the technical material used during the course.

Remarks

- In both the exam and all other tests, exercises, or written assignments, spelling and grammar correction will be required. Each mistake will result in a reduction of the grade obtained, which may be as high as a fail.
- If plagiarism is found in an assessment, it may be graded with a numerical grade of zero, regardless of the disciplinary procedure that may be initiated and, if applicable, the sanction that may be imposed in accordance with current legislation.
- Intellectual honesty is vital in academic communities and for the fair evaluation of student work. All papers submitted in this course must be of original authorship. Papers that involve fraudulent collaboration or composition aided by artificial intelligence (ChatGPT or others) will not be accepted, unless their use is part of the course content or authorized by the teaching faculty.

REFERENCES

Basic references

- LÓPEZ OLANO, Carlos (2015). *Tecnologías de la Comunicación I*. Valencia: Tirant lo Blanch. https://trobes.uv.es/permalink/34CVA_UV/1b8uv2g/alma991009508887806258
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- PANASONIC (2023). *Manual de funcionamiento Memory Card Camcorder* (pdf en aula virtual).

Additional references

- CASTILLO, José María (2010). *Televisión, realización y lenguaje audiovisual*. IORTV: Madrid.
- HOLMAN, Tomlinson (2010). *Sound for Film and Television*. Burlington: Routledge.
- MARZAL, Javier & LÓPEZ, Francisco (2008). *Teoría y técnica de la producción audiovisual*. Valencia: Tirant lo Blanch.
- NO FILM School (2025). *The DSLR Cinematography guide*.
- SAMUELSON, David W. (1984). *La cámara de cine y el equipo de iluminación: elección y técnica*. Madrid: Instituto Oficial de Radio y Televisión.