



COURSE DATA

DATA SUBJECT

Code: 36577

Name: Communication technologies III

Cycle: Undergraduate Studies

ECTS Credits: 6

Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
1333 - Degree in Audiovisual Communication	Facultat de Filologia, Traducció i Comunicació	2	Second quarter
1937 - Double Degree Program in Audiovisual Communication and Journalism	Facultat de Filologia, Traducció i Comunicació	2	Second quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1333 - Degree in Audiovisual Communication	Tecnologías de los medios audiovisuales	COMPULSORY
1937 - Double Degree Program in Audiovisual Communication and Journalism	Segundo Curso (Obligatorio)	COMPULSORY

COORDINATION

PUCHADES LATORRE JAVIER PEDRO

SUMMARY

Communication Technologies III is a compulsory course of the Degree in Audiovisual Communication and of the Double Degree in Audiovisual Communication and Journalism that is part of the subject Audiovisual Media Technology.

This course is the continuation of Communication Technologies I and II, in which students have already learned to handle image capture and editing tools. Its content includes, on the one hand, an in-depth study of the main tools for post-production, composition, sound design, and graphics for the creation and production of audiovisual content. It also incorporates content related to technologies for image editing and processing in digital communication environments. The course develops the technical aspects of interactive communication and the creation of multimedia content adapted to digital multi-platform distribution.

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

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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 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 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 express themselves fluently and effectively in their own languages, as well as in a third language (preferably English), taking advantage of the linguistic and literary resources that are most appropriate for the different forms of media.

Students should be able to obtain and select relevant information and sources in order to solve problems and elaborate on strategies.

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 work as a team, communicate their own ideas and integrate themselves into group projects aimed at achieving results.

Students should have an understanding of own and other social, historical, economic and cultural aspects



within their relevant contexts.

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 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.

DESCRIPTION OF CONTENTS

1. Advanced Editing

Explanation and configuration of the workspace, use of advanced editing tools and techniques (keyboard shortcuts, shot adjustment during editing, audio-video editing, sequence nesting, working with various formats).

1.1 Project creation and workspace setup

1.2 Importing and organizing files

1.3 Timeline editing

1.4 Editing tools

1.5 Transitions, effects, and adjustments

1.6 Project export

2. Multicamera Editing

Understanding various synchronization methods, live editing and revision, application and consideration of audiovisual language techniques (axis jump, 30-degree rule, shot scale). Working with proxies. Preparing the sequence for exchange with other platforms.

2.1 Project and audiovisual material preparation

2.2 Analysis of different synchronization types



2.3 Activation of the multicamera monitor and real-time editing

2.4 Completion and export of the project

3. Color Correction and Grading

Analysis of color correction tools in Adobe Premiere Pro. Basic concepts of the Lumetri panel, the use of curves and color wheels, and the application of LUTs (Look-Up Tables) are examined to achieve a consistent and professional visual style. Theoretical foundations of color, including chromatic harmony, gamma curves, subsampling, and gamuts.

This is especially useful for students seeking to enhance the aesthetic finish of their audiovisual projects.

3.1 Fundamentals of digital color and applied theory

3.2 Lumetri panel

3.3 Use of curves and color wheels

3.4 LUTs and professional workflow

4. Masking, Matte Keying, and Creative Transitions in Premiere Pro

Advanced editing techniques in Adobe Premiere Pro focused on the use of masks, video keying through mattes (matte keying), and the creation of stylized transitions with adjustment layers. Tools are explored that allow visual combination of multiple sources, isolation of elements within a scene, and application of complex effects non-destructively. The content is ideal for intermediate or advanced students looking to enhance the expressiveness and visual impact of their edits.

4.1 Masks: definition and basic applications

4.2 Matte keying: advanced clip combination Wright, S. Efectos Digitales en cine y vídeo. Ed. Escuela de cine y video

5. Slow Motion and Transitions with Adjustment Layers

A comprehensive overview of two key audiovisual editing techniques: creating smooth and precise slow-motion effects, and applying transitions using adjustment layers to optimize editing. Professional methods for slowing down clips, using optical interpolation, and adding stylized effects through non-destructive layers are explained.

5.1 Project and Clip Setup for Slow Motion

5.2 Video Slow-Down Techniques

5.3 Using Adjustment Layers for Transitions

Adjustment layers in Adobe Premiere Pro allow you to apply effects and transitions to multiple clips simultaneously, providing a non-destructive and efficient workflow for creating seamless transitions and stylized looks.

6. Use of Essential Graphics in Adobe Premiere Pro

An in-depth analysis of the Essential Graphics panel in Adobe Premiere Pro. This section covers both the incorporation of pre-designed templates (MOGRT) and the creation of custom graphics from scratch. Techniques for animation, layer organization, format adaptation, and exporting reusable graphics for



audiovisual projects are also explored.

6.1 Essential Graphics Panel: Structure and Navigation

6.2. Using MOGRT (Motion Graphics Templates)

6.3 Creating Graphics from Scratch in Premiere and After Effects

6.4 Exporting and Reusing Graphic Compositions

7. Chroma Keying in Adobe Premiere Pro

Study of chroma key techniques, lighting and post-production tips for chroma, and their application in creating virtual environments. The Ultra Key effect in Adobe Premiere Pro is used to explore every parameter for achieving a clean key, free of edges or interference, and integrating the subject coherently into the new environment.

7.1 Preparing Material with Green/Blue Screen

7.2 Applying the Ultra Key Effect

7.3 Fine Adjustments in the Ultra Key Panel

7.4 Enhancing Visual Integration

8. After Effects

A complete introduction to the interface and basic tools of Adobe After Effects. Students learn to navigate the program, identify key panels, use essential tools (selection, text, shapes, pen, etc.), and understand the layer-based workflow, compositions, and keyframe animation. The use of Dynamic Link for communication and exchange between Adobe Suite programs is also covered.

8.1 Project and Composition Creation

8.2 Workspace Exploration

8.3 Importing and Organizing Assets

8.4 Main Tools on the Top Bar

8.5 Layers: Creation and Hierarchy

8.6 Keyframe Animation

8.7. Nested Compositions and Precompositions

8.8 Preview and Performance

8.9 Exporting Work

9. Artificial Intelligence Applied to Audiovisual and Social Media

Production of a short video with integrated AI tools aimed at social media. The AI tools employed focus on audiovisual content creation, including format adaptation with the smart Auto Reframe function, automatic subtitling with Premiere and After Effects, and the creation of synthetic voiceovers and music generated by AI.



- 9.1 Auto Reframe: Automatic Reframing
- 9.2 Automatic Subtitling: Transcription and Caption Creation
- 9.3 Text to Speech: Synthetic Voice Generation
- 9.4 Reuse and Advanced Subtitle Adjustments
- 9.5 Verification and Adjustment of Results
- 9.6 Exporting Reframed Sequences in Desired Formats for Social Media

Learning outcomes

These contents will be reflected in the following learning outcomes:

- Adjust color in image editing processes.
- Apply audiovisual production and dissemination techniques and processes in their various phases.
- Understand the codes and modes of representation specific to audiovisual communication.
- Organize sound and visual materials in relation to a narrative.
- Compose an audiovisual and/or multimedia master.
- Manage technologies applied to the media.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	15,00
Computer classroom practice	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	10,00
Preparation of lessons	0,00



Preparation for assessment activities	0,00
Resolution of case studies	40,00
Total hours	90,00

TEACHING METHODOLOGY

In-person activities

Face-to-face teaching will follow the following methodologies:

- **Lecture:** Focused on the general explanation of the subject and the necessary methodological clarifications. Theoretical explanation of the tools for each topic, with examples of practical applications.
- **Resolution of theoretical-practical problems:** Theoretical concepts will be put into practice through classroom exercises, with the aim of applying editing and post-production techniques in a practical scenario and observing how the theoretical concepts are carried out, in order to resolve any questions that may arise during the process. The different sessions involve practical application of each of the various editing and post-production techniques explained in class, with the assignments to be submitted at the end of the session.
- **Classroom presentations and group work:** Sessions involving the development of group audiovisual content will be presented in class by the students, explaining the procedure used and the difficulties they faced during its completion.

Non-classroom activities

Students will carry out the following non-classroom activities:

- **Preparation of individual or group assignments:** Students will complete activities outside the classroom, which may include outings for image capture and group meetings for the ideation and preparation of projects.
- **Independent study and work:** Students manage their own learning outside the classroom, researching, analyzing, and applying concepts independently. This approach fosters responsibility, self-management, and the development of critical skills.
- **Resolution of practical cases:** Students analyze and solve real or simulated situations related to the use and management of technological tools in communication contexts.

Sustainable Development Goals

This course especially takes into account the following Sustainable Development Goals:

- **SDG 4, Quality Education.** Target 7: Ensuring 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 the appreciation of cultural diversity, as well as 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

General Grading System

The general grading system will follow the *Regulations on Assessment and Grading at the Universitat de València for Undergraduate and Master's Degrees*, approved by the Governing Council on May 30, 2017 (ACGUV 108/2017).

Assessment in the First Examination Session

Assessment in the first examination session will be carried out as follows:

- **Assessment of technical learning (70%):** Students will be assessed on the submission of practical assignments carried out in class, corresponding to the topics detailed in the course guide. Submission of these assignments is mandatory; failure to submit them within the specified deadlines will require their completion during the first examination period. If the assignments are not submitted during the first session, the student will be considered to have failed this session and will not be allowed to recover it by submitting the assignments during the second session. Recovery in the second session will involve a new assessment process.
- **Submission of outlines, summaries, and proposed texts (20%):** Assessment will be based on the delivery of proposed materials and content development such as scripts, work plans, etc., prior to the production of the audiovisual work for social media chosen by the student. These outlines and summaries may not be submitted during the second session. Recovery in the second session will, instead, consist of a new assessment process.
- **Assessment of attitude and participation in class dynamics (10%):** Attendance will be assessed, given that practical work is carried out in groups. Non-attendance results in an increased workload for the rest of the group. This component is not recoverable in the second session.

Assessment in the Second Examination Session

Grades obtained in passed assessment components during the first session will be maintained, where applicable. Assessment of failed or unsubmitted components will be carried out as follows:

- **Final written test (70%):** A technical-practical exam will be administered to substitute for the



uncompleted lab assignments. The exam will consist of a practical exercise covering various topics addressed during the course. The final grade will be the result of the sum of the individual components of the exercise, each evaluated according to its complexity and its role in the final audiovisual product. Each component will be assessed individually and weighted accordingly.

- **Submission of outlines, summaries, and proposed texts (20%):** Students must submit a summary of the topics covered throughout the course.
- **Assessment of attitude and participation in class dynamics (10%):** This component is not recoverable in the second session. The grade obtained in the first session will be retained.

Additional Remarks

In all exams, assignments, exercises, or written work, correct spelling and grammar will be required. Each mistake will result in a reduction of the final grade, which may lead to failure of the assessment.

If plagiarism is detected in any assessment task, the assignment may be graded with a score of zero, regardless of any disciplinary proceedings that may be initiated and, where applicable, any sanctions in accordance with current legislation.

Intellectual honesty is essential in academic communities and for the fair assessment of student work. All assignments submitted in this course must be original works of authorship. Assignments that include fraudulent collaboration or that are generated using artificial intelligence tools (e.g., ChatGPT or others) will not be accepted, unless such use is part of the course content or explicitly authorised by the teaching staff.

REFERENCES

Basic references

- Castillo, J.M. (2022) *Televisión realización y lenguaje audiovisual* José María Castillo. Madrid: Instituto RTVE.
- Faulker, A. (2015). *After Effects CC*. Madrid: Anaya Multimedia.
- Mcgrath, D. (2001). *Montaje y postproducción*. Madrid: Océano
- Mediaactive (2017). *Aprender Adobe After effects CC 2016 release con 100 ejercicios Prácticos*. Barcelona: Marcombo.

Additional references

- Espinosa Pérez, F.J. (2013). *La señal de vídeo en alta definición*. Círculo Rojo.
- VV.AA. (2012). *Aprender Postproducción avanzada con After Effects*. S.A. Mancorbo.
- Wright, S. *Efectos Digitales en cine y vídeo*. Ed. Escuela de cine y video