UNIVERSIDAD DE CASTILLA - LA MANCHA
GUÍA DOCENTE

1. General information

Course: SOUND TECHNOLOGIES
Type: CORE COURSE
Degree: 401 - UNDERGRADUATE DEGREE PROGRAMME IN AUDIOVISUAL COMMUNICATION
Center: 12 - FACULTY OF COMMUNICATION
Year: 1
Main language: Spanish
Use of additional languages:
Web site:

Code: 16509
ECTS credits: 6
Academic year: 2023-24
Group(s): 30
Duration: C2
Second language:
English Friendly: Y
Bilingual: N

Lecturer: ISABEL GONZALEZ RODRIGUEZ - Group(s): 30

Building/Office	Department	Phone number	Email	Office hours
E. Politécnica Cuenca/2.11	INGENIERÍA ELÉCTRICA, ELECTRÓNICA, AUTOMÁTICA Y COMUNICACIONES	926053821	isabel.gonzalez@uclm.es	

2. Pre-Requisites

Successfully take the subject of Communication Technologies, from the first semester of the first year.

3. Justification in the curriculum, relation to other subjects and to the profession

Knowledge and management of basic audiovisual technologies associated with audiovisual content production processes is essential for the professional development of audiovisual communicators.

Creating and manipulating audio or audiovisual content requires knowledge of fundamentals of sound generation and propagation, the influence of the spatial environment and the parameters to characterize audio signals. Management of sound recording equipment and techniques is necessary, as well as the basic principles of editing and processing the audio signal, and its integration into audiovisual messages.

4. Degree competences achieved in this course

Course competences

Code	Description
CB05	Develop the learning skills necessary to undertake further studies with a high degree of autonomy.
CE15	Recreate the lighting and sound atmosphere of an audiovisual production.
CE16	Carry out the processes of recording, composition, editing and post-production of audiovisual products.
CE18	Select and use technological tools for the creation of multimedia digital material, animations, virtual sets and interactive contents
CE20	Select and use specific techniques and equipment for capturing and processing audio and video signals.
CG03	Use the basic tools of information and communication technologies necessary for the exercise of professions linked to audiovisual communication.
CG04	Expose the results of academic work in writing, orally or by other means, in accordance with the canons of the communication disciplines.
CG06	Know the state of the world and its recent historical evolution as well as acquiring the concepts necessary for understanding its political, economic, technological and sociocultural dimensions in such a way that they serve as an instrument in the resolution of professional problems and challenges.
CG07	Acquire the ability to work in a team, face collective challenges and cooperatively solve problems, respecting the diversity of the participants and of their contributions.
CT01	Learn a second foreign language.

5. Objectives or Learning Outcomes

Course learning outcomes

Description

Join and adapt to a professional audiovisual team.
Correctly handle the linguistic and discursive resources of the Spanish language.
Know the equipment and techniques for recording and editing audiovisual events.
Keep abreast of the technological situation regarding the broadcasting and distribution of audiovisual content.
Know the theoretical basics and professional practices in relation to audiovisual language and the construction and analysis of audiovisual narratives.
Know and apply the phases of the business plan to the audiovisual communication system through the development of a project.
Use computer techniques for the manipulation of the audiovisual signal.
Adapt to constant technological change.

6. Units / Contents

Unit 1: Sound and listen

Unit 1.1 Sound. Generation and propagation

Unit 1.2 Audition and voice characteristics

Unit 1.3 Practice 1

Unit 2: Audio signal

Unit 2.1 The audio chain. Analog and digital audio

Unit 2.2 DAW. Sound cards and digital recorders

Unit 2.3 Practice 2

Unit 3: Microphones and audio monitoring

Unit 3.1 Microphones

Unit 3.2 Loudspeakers

Unit 3.3 Practice 3

Unit 4: Audio editing and processing

Unit 4.1 Audio editing

Unit 4.2 Frequency, dynamics and time processors

Unit 4.3 Audio equipment

Unit 4.4 Practica 4

Unit 5: Recording techniques and audio mixing

Unit 5.1 Recoding techniques

Unit 5.2 Audio mixers

Unit 5.3 Practice 5

Unit 6: Studios and their facilities

Unit 6.1 Room acoustics

Unit 6.2 Recording studios and radio studios

Unit 6.3 Practice 6

Unit 7: Audio in audiovisual

Unit 7.1 sound language

Unit 7.2 audiovisual sound

Unit 7.3 Practice 7

7. Activities, Units/Modules and Methodology

Training Activity	Methodology	Related Competences (only degrees before RD 822/2021)	ECTS	Hours	As	Com	Description
Class Attendance (theory) [ON-SITE]	Lectures	CB05 CE15 CE16 CE18 CE20 CG06 CT01	0.88	22	N	-	
Class Attendance (practical) [ON-SITE]	Practical or hands-on activities	CB05 CE15 CE16 CE18 CE20 CG03 CG04 CG07 CT01	1.04	26	N	-	
Practicum and practical activities report writing or preparation [OFF-SITE]	Guided or supervised work	CB05 CE15 CE16 CE18 CE20 CG03 CG04 CG07 CT01	2.4	60	Y	Y	
Project or Topic Presentations [ON-SITE]	Assessment tests	CE18 CG03 CG04	0.16	4	Y	N	
Progress test [ON-SITE]	Assessment tests	CB05 CE15 CE16 CE18 CE20 CG03 CG04	0.08	2	Y	N	
Final test [ON-SITE]	Assessment tests	CB05 CE15 CE16 CE18 CE20 CG03	0.08	2	Y	Y	
Group tutoring sessions [ON-SITE]	Group tutoring sessions		0.16	4	N	-	
Study and Exam Preparation [OFF-SITE]	Self-study	CB05 CE15 CE16 CE18 CE20 CT01	1.2	30	N	-	
		Total:	**6**	**150**			
		Total credits of in-class work: 2.4					**Total class time hours: 60**
		Total credits of out of class work: 3.6					**Total hours of out of class work: 90**

As: Assessable training activity

Com: Training activity of compulsory overcoming (It will be essential to overcome both continuous and non-continuous assessment).

8. Evaluation criteria and Grading System

Evaluation System	Continuous assessment	Non-continuous evaluation*	Description
Practicum and practical activities reports assessment	30.00%	30.00%	
Oral presentations assessment	30.00%	0.00%	
Final test	40.00%	40.00%	
Final test	0.00%	30.00%	
Total:	**100.00%**	**100.00%**	

According to art. 4 of the UCLM Student Evaluation Regulations, it must be provided to students who cannot regularly attend face-to-face training activities the passing of the subject, having the right (art. 12.2) to be globally graded, in 2 annual calls per subject , an ordinary and an extraordinary one (evaluating 100% of the competences).

Evaluation criteria for the final exam:

Continuous assessment:

The minimum note of the obligatory evaluable activities will be 3.0 for the reports and 4.0 for the final tests.

In order to benefit from the continuous assessment, all mandatory reports established throughout the course must be submitted in a timely manner.

The reports of failed practices may be recovered with a new delivery in extraordinary call, on the date agreed by the teacher.

Non-continuous evaluation:

There will be two final tests: a multiple choice test and/or short questions (40%) and a theoretical-practical test related to the practices (30%).

The practical reports must be delivered on the date of the examination call.

Students who go from continuous to non-continuous evaluation will keep the qualification of the practice reports already delivered.

Any student may switch to the non-continuous assessment modality as long as they have not participated during the class teaching period in assessable activities that together account for at least 50% of the total assessment of the subject. In case of having reached 50% of evaluable activities or if, in any case, the class period has ended, she will be considered in continuous evaluation without the possibility of changing the evaluation modality.

Specifications for the resit/retake exam:

The minimum grade for the compulsory evaluable activities will be 3.0 for the practice reports and 4.0 for the final test.

The reports of failed practices may be recovered with a new delivery in extraordinary call, on the date agreed by the teacher.

Specifications for the second resit / retake exam:

The same as for the retake exam.

9. Assignments, course calendar and important dates

Not related to the syllabus/contents

Hours	hours
Practicum and practical activities report writing or preparation [AUTÓNOMA][Guided or supervised work]	60
Project or Topic Presentations [PRESENCIAL][Assessment tests]	4
Progress test [PRESENCIAL][Assessment tests]	2
Final test [PRESENCIAL][Assessment tests]	2
Study and Exam Preparation [AUTÓNOMA][Self-study]	30

Unit 1 (de 7): Sound and listen

Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	5
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	2
Group tutoring sessions [PRESENCIAL][Group tutoring sessions]	4

Unit 2 (de 7): Audio signal

Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	3
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	2

Unit 3 (de 7): Microphones and audio monitoring

Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	4
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	4

Unit 4 (de 7): Audio editing and processing

Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	3
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	5

Unit 5 (de 7): Recording techniques and audio mixing

Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	3
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	5

Unit 6 (de 7): Studios and their facilities

Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	2
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	4

Unit 7 (de 7): Audio in audiovisual

Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	2
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	4

Global activity

Activities	hours
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	26
Project or Topic Presentations [PRESENCIAL][Assessment tests]	4
Group tutoring sessions [PRESENCIAL][Group tutoring sessions]	4
Final test [PRESENCIAL][Assessment tests]	2
Progress test [PRESENCIAL][Assessment tests]	2
Practicum and practical activities report writing or preparation [AUTÓNOMA][Guided or supervised work]	60
Class Attendance (theory) [PRESENCIAL][Lectures]	22
Study and Exam Preparation [AUTÓNOMA][Self-study]	30
Total horas:	150

10. Bibliography and Sources

Author(s)	Title/Link	Publishing house	City	ISBN	Year	Description
Whitaker, Jerry C., editor	Master handbook of audio production : a guide to standards,	McGraw-Hill	New York	0-07-140876-2	2003	

Cuenca David, Ingnasi	equipment, and system design Tecnología del sonido	Thomson Paraninfo	Madrid	84-283-2920-6	2005
Bruce Bartlett, Jenny Bartlett.	Practical recording techniques : the step-by-step approach to professional audio recording	Routledge	New York	978-1-138-90442-2	2017
Rumsey, Francis; McCormick, Tim	Sound and recording: applications and theory	Routledge		9780367553029	2021
Katz, Bob	La masterización de audio: el arte y la ciencia	Escuela de cine y video	Andoain	84-933445-5-9	2004
Zafra, Julián	Ingeniería de sonido. Conceptos, fundamentos y casos prácticos	Ra-Ma	Madrid	978-84-9964-743-2	2018
Chion, Michel (trad. Goldstein,Victor)	La audiovisión: sonido e imagen en el cine	La Marca editora	Buenos Aires	978-950-889-318-5	2018
Izhaki. Roey	Mixing audio: concepts, practices, and tools	Routledge	New York	978-1-138-85978-4	2017
Piñeiro Otero, Teresa	Sonidos que cuentan. La ambientación sonora en el audiovisual	UOC	Barcelona	978-84-9180-614-1	2019