



Course guide

804471 - DEA - Audio Design and Editing

Last modified: 05/09/2024

Unit in charge: Image Processing and Multimedia Technology Centre
Teaching unit: 804 - CITM - Image Processing and Multimedia Technology Centre.

Degree: BACHELOR'S DEGREE IN DIGITAL DESIGN AND MULTIMEDIA TECHNOLOGIES (Syllabus 2023).
(Compulsory subject).

Academic year: 2024 **ECTS Credits:** 6.0 **Languages:** Catalan

LECTURER

Coordinating lecturer: Palmada, Isidre

Others:

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

Knowledge

Identify the technological concepts and processes related to the formation and recording of photographic images, both still and moving, in the context of the production of visual content.

Skills

Correctly use capture equipment and computer programmes for the editing, production and post-production of image and sound in the development of audiovisual contents.

Design, produce and post-produce audio signals for multimedia applications.

- Obtain a basic knowledge of audio theory and processing.
- Learn to run a DAW and have a basic level of recording techniques.
- Get tools to be able to recreate a sound design in the image.
- Creation of a sound design and dialogues for an image.

STUDY LOAD

Type	Hours	Percentage
Guided activities	12,0	8.00
Hours large group	30,0	20.00
Self study	90,0	60.00
Hours medium group	18,0	12.00

Total learning time: 150 h

CONTENTS

1. Theory, the theoretical bases of sound

Description:

- 1.1 What is sound?
 - 1.1.1. History and context of sound applied to the image. Beginnings of sound cinema, evolution.
 - 1.1.2. The sound within the audiovisual context and the relationship with the narrative.
- 1.2 General auditory perception.
 - 1.2.1 Sound workshop. Learn to listen.
 - 1.2.2. Auditory analysis.
- 1.3 Acoustics.
 - 1.3.1 Fundamentals of acoustics.
 - 1.3.2 General auditory perception.
 - 1.3.3 Acoustic treatment and room design.
- 1.4 The soundscape.

Full-or-part-time: 45h

Theory classes: 20h

Self study : 25h

2. Live sound recording

Description:

- 2.1. Define the Sound-Board.
 - 2.1.1. dialogues Recording techniques.
 - 2.1.2. Sound Design. Recording planning.
 - 2.1.3. music Film Scoring.
- 2.2. recording
 - 2.2.1. General and multichannel microphones. Mono and stereo channels.
 - 2.2.2. Zoom h5. Mixpre- 3 II. Power. UWP-D21/K33. Boob Mic: NTG-5. Earphones.
 - 2.2.3. Analogue and digital recording technology.
- 2.3. Direct Recording I.
 - 2.3.1. Practices I: Recording of the exterior.
 - 2.3.2. Practices II. Recording of exterior and interior dialogues.
- 2.4. Direct Recording II:
 - 2.4.1. Practices I: Sound Design Recording. Mickeymousing effect.
 - 2.4.2. Practices II: Creation of a Sampler. Sound libraries
- 2.5. Audio file processing and storage I.
- 2.6. Audio editing.

Full-or-part-time: 45h

Theory classes: 20h

Self study : 25h



3. Sound post-production and digital processing

Description:

- 3.1. Editing with cubase (DAW). File processing II.
 - 3.1.1. Basics of recording in the Studio. Recording of voices and effects.
 - 3.1.2. Post-production equipment and acoustics.
 - 3.1.3. Audio processing and MIDI.
- 3.2. Audio effects:
 - 3.2.1. compression Multicompression, Limiters, Desser.
 - 3.2.2. equalization distortion Mono effects (radio effect).
 - 3.2.3. reverberation Delays. modulation
 - 3.2.4. Advanced automation. panning
- 3.3. Creating a sound environment.
 - 3.3.1. Practices I: Creation and recording of dialogues.
 - 3.3.2. Practice II: Creation and recording of the sound space and soundtrack.
 - 3.3.3. Practices III: Viewing the short films.
- 3.4. ISOTOPE RX.
- 3.5. Mix processing and mastering.
- 3.6. Sound environment creation for video games.
- 3.6. DOLBY SOURROUND and DOLBY ATMOS. Cinema rooms

Full-or-part-time: 60h

Theory classes: 20h

Self study : 40h

GRADING SYSTEM

- Individual practice exercises with a weighting of 40% of the final grade of the subject.
- There will be a Final Project with a weighting of 20% of the subject.
- Final exam with a weighting of 30% of the subject.
- "Participation and learning attitude" will be assessed with a weighting of 10% of the subject.
- Students who participate in the continuous assessment and do not pass this subject, may take the reassessment test in which the theoretical content will be reassessed (partial exam and final exam).

Irregular actions that may lead to a significant variation in the grade of one or more students constitute a fraudulent performance of an evaluation act. This action will lead to a descriptive grade of fail and a numerical grade of 0 for the ordinary global assessment of the subject, without the right to re-evaluation.

If the teachers have evidence of the use of AI tools that are not permitted in the assessment tests, they may summon the students involved to an oral test or a meeting to verify the authorship.

EXAMINATION RULES.

- The practices will be carried out during independent work. The weighting is as follows: Practice 1 (5%), Practice 2 (10%), Practice 3 (10%), Practice 4 (15%). The total of the practices count for 40% of the final grade of the course.
- The late delivery of the practice involves suspending it.
- Given the nature of the subject and the university nature of the degree, both the content of the exercises such as their correct writing and layout.