

## 1.1 Module 13: Introduction to Audio

### 1.1.1 Headline information about the module

<b>Module title</b>	Introduction to Audio
<b>Module NFQ level (only if an NFQ level can be demonstrated)</b>	7
<b>Module number / reference</b>	CT013
<b>Parent programme(s) the plural arises if there are embedded programmes to be validated</b>	BA (Hons) in Creative Technologies and Digital Art
<b>Stage of parent programme</b>	2
<b>Semester (semester1/semester2 if applicable)</b>	Semester 1
<b>Module credit units (FET/HET/ECTS)</b>	ECTS
<b>Module credit number of units</b>	5
<b>List the teaching and learning modes</b>	Full-Time, Direct Contact / Blended
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learners must have achieved the programme entry requirements
<b>Pre-requisite module titles</b>	N/A
<b>Co-requisite module titles</b>	N/A
<b>Is this a capstone module? (Yes/no)</b>	No
<b>Specification of the qualifications (academic, pedagogical and professional/occupational) and experience required of staff (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Lecturing staff must be qualified to a minimum of NFQ Level 9 in a related discipline, or hold an equivalent professional qualification. Experience in a related field, such as sound production, sound recording or sound editing games or animation would be desirable. Ideally, they would also hold a third level teaching qualification (e.g. the Griffith College Certificate in Education, Learning and Development).
<b>Maximum number of learners per centre (or instance of the module)</b>	25
<b>Duration of the module</b>	12 weeks
<b>Average (over the duration of the module) of the contact hours per week</b>	3
<b>Module-specific physical resources and support required per centre (or instance of the module)</b>	<ul style="list-style-type: none"> <li>• Computer lab with capacity for 25 learners</li> <li>• Access to shared microphones and portable recorders</li> <li>• FMOD.</li> </ul>

<b>Analysis of required learning effort</b>		
<b>*Effort while in contact with staff</b>	<b>Minimum ratio teacher / learner</b>	<b>Hours</b>
Classroom and demonstrations	1:25	36
Monitoring and small-group teaching	-	-
Other (specify)	-	-
<b>Independent Learning</b>		
Directed e-learning (hours)		-
Independent learning (hours)		39
Assignment		50
Work-based learning hours of learning effort		-
<b>Total Effort (hours)</b>		<b>125</b>

<b>Allocation of marks (within the module)</b>					
	<b>Continuous assessment</b>	<b>Supervised project</b>	<b>Proctored practical examination</b>	<b>Proctored written examination</b>	<b>Total</b>
<b>Percentage contribution</b>	-	-	<b>100%</b>	-	<b>100%</b>

### **1.1.2 Module aims and objectives**

The aim of this module is to provide learners with the knowledge-base and skillset required to create sound effects and dialogue recordings for animation, games and other forms of digital media presentation. The module presents the essential theory of sound and digital audio as well as introducing the learner to the practical skills involved in using both audio hardware and software. Learners examine the theoretical basis for sound design concepts and experiment with their application through practical involvement with Foley and ADR techniques, recording processes and audio sequencing within a digital audio workspace. Learners are familiarised with industry-standard software for the purposes of editing and manipulating SFX, audio signal processing and dynamic presentation. Learners are also required to apply best practice in audio workflow management.

### **1.1.3 Minimum intended module learning outcomes**

Upon successful completion of this module, the learners are able to:

- (i) demonstrate audio recording and editing techniques;
- (ii) select, record and manipulate sound effects for a virtual environment;
- (iii) correctly apply the processes and technology involved in the creation of original Foley sound effects;
- (iv) integrate music and sound effects using industry-standard software;
- (v) apply and assess industry workflows and terminology;
- (vi) apply sound design concepts to their creative productions.

### **1.1.4 Rationale for inclusion of the module in the programme and its contribution to the overall MIPLOs**

This module is designed to encourage the development of complementary skills in audio production to support creative expression and increase the likelihood of employment prospects within industry after graduation. Sound designers play a key role in the production pipelines of the games and film industries, complementing visual aesthetics in cross-modal experiences. This module provides

learners with the opportunity to experiment within the field of audio, giving them the basic tools to apply audio techniques to both linear and dynamic virtual environments, and to collaborate more effectively with audio specialists. The minimum intended module learning outcomes address programme learning outcomes (i), (ii), (iii), (iv), (vi), (viii) and (ix).

### **1.1.5 Information provided to learners about the module**

Learners are provided with a number of sources of information about this module, such as the induction session which presents learners with an overview of the modules. The induction session touches upon key areas of study such as the module aims, expectations and supports available. At the commencement of each module, the learner is provided with a detailed overview of the module, the assessment strategy and schedule. The learner is then issued assignment briefs that fall in line with the deliverables outlined in the module objectives / outcomes.

The Learner Handbook, included with this submission, demonstrates how the learning in this module fits in to the overall structure of the programme. The handbook contains detailed module descriptors including teaching, learning and assessment strategies. Learners are provided with access to a learner Google account and to Google Classroom. Here, information regarding module descriptors, programme timetables and assessment information is uploaded. Google Classroom is for use by both learners and staff for the presentation of class notes and content as well as a point for assignments to be issued and submitted to.

### **1.1.6 Module content, organisation and structure**

The four principal subject areas, with indicative content for each, is listed below:

#### **Audio recording techniques (25%)**

- Basic theory of sound
- Microphones
- Introduction to a DAW
- Recording and editing audio
- Signal flow and gain structures of basic audio systems
- Basic mixing and processing

#### **Sound design (25%)**

- Sound design concepts
- Texture and ambience
- Room tone
- Interior and exterior sounds
- Diegetic and non-diegetic sound.

#### **Foley art (25%)**

- Introduction to Foley art
- Stage setup
- Manipulation of everyday sounds

#### **Audio integration (25%)**

- Introduction to industry standard software
- Recording and editing audio (dialogue and sound effects) for a linear presentation, using a DAW
- Sourcing, editing and manipulating audio (SFX and music) for a dynamic presentation, using FMOD.

### 1.1.7 Module teaching and learning (including formative assessment) strategy

The module is delivered through a combination of lectures and practical sessions, supplemented by expert guest speakers from industry. Appropriate case studies are used to demonstrate the application of audio to animation and creative projects. Mock assignments are uploaded to the Google Classroom, virtual learning environment. Emphasis is placed on extending the learners' knowledge and preparation for employment within the broader animation and creative industries.

The module is delivered using a three-hour session, once a week, for each of the 12 weeks. The general structure includes an introduction to techniques and their theoretical underpinnings, followed by a demonstration by the lecturer. Remaining contact time is dedicated to supervised practical work undertaken by the learner.

Activity	Teaching / Learning Strategy	Learning Environment
Lectures and demonstrations (36 hours)	Formal lectures and demonstrations introducing learners to some of the foundational principles of audio production, including recording techniques, sound design, Foley art, and audio integration. (See 6.13.6)	College
Independent work (39 hours)	Self-directed work	College / Home
Assignment (50 hours)	There are two deliverables: (i) a proctored practical Foley and dialogue performance, recording, and integration (50%); (ii) a proctored practical audio SFX and music sourcing, editing, manipulation and integration with supporting documentation (50%).	College / Home

### 1.1.8 Work-based learning and practice-practice

There is no work-based learning or practice-placement within this module.

### 1.1.9 E-Learning

Google Classroom acts as a reference point for the learner where all relevant information regarding the module is compiled. It also provides the learner with a messaging service between classmates and staff. Any changes or updates to module content is reflected on the platform along with a notification of change / messaging service. Google Classroom also accommodates for the submission of larger file types, a common feature of this programme. Learners also have access to additional academic material and supports through the Moodle virtual learning environment (VLE).

### 1.1.10 Module physical resource requirements

The module requires a computer lab, with capacity for 25 learners, with access to shared microphones and portable recorders.

### 1.1.11 Reading lists and other information resources

#### Primary reading

Ament, V.T. (2014) *The Foley Grail*, 2<sup>nd</sup> edition. Burlington, MA: Focal Press.  
Beauchamp, R. (2013) *Designing Sound for Animation*, 2<sup>nd</sup> edition. Burlington, MA: Focal Press.  
Hosken, D. (2011) *An introduction to music technology*. New York: Routledge.  
Purcell, J. (2013) *Dialogue Editing for Motion Pictures: A Guide to the Invisible Art*, 2<sup>nd</sup> edition. Burlington, MA: Focal Press.  
Sonnenschein, D. (2002) *Sound Design: The Expressive Power of Music, Voice and Sound Effects in Cinema*. Studio City, CA: Michael Wiese Productions.

#### Secondary reading

Owinski, B. (2017) *The Recording Engineers Handbook*, 4<sup>th</sup> edition. Burbank, CA: BOMG Publishing.  
Robinson, C. (2019) *Game Audio with FMOD and Unity*. New York: Routledge.  
Schütze, S. and Irwin-Schütze, A. (2013) "FMOD Studio 101". Sound Librarian.  
Viers, R. (2008) *The Sound Effects Bible: How to Create and Record Hollywood Style Sound Effects*, 3<sup>rd</sup> edition. Studio City, CA: Michael Wiese Productions.  
Yewdell, D.L. (2011) *Practical Art of Motion Picture Sound*, 4<sup>th</sup> edition. Burlington, MA: Focal Press.

### 1.1.12 Specifications for module staffing requirements

For each instance of the module, one lecturer qualified to at least masters level (NFQ Level 9) in a related discipline, or hold an equivalent professional qualification. Experience in a relevant field, such as sound production, sound recording or sound editing would be desirable.

Ideally, they would also hold a third level teaching qualification (e.g. the Griffith College Certificate in Education, Learning and Development).

### 1.1.13 Module summative assessment strategy

Assessment for this module comprises two practical examinations of equal weight amounting to 50% of the overall grade. The first exam tests Foley and dialogue performance, recording and integration, while the second evaluates the learner's audio SFX and music sourcing, editing, manipulation and integration with supporting documentation. The assessed work breakdown can be seen in the table below.

No.	Description	MIMLOs	Weighting
1	Proctored Practical Exam: Foley and Dialogue Performance	(i), (iii), (iv), (v), (vi)	50%
2	Proctored Practical Exam: Audio SFX and Music Sourcing	(i), (ii), (iv), (v), (vi)	50%

### 1.1.14 Sample assessment materials

Please see sample assessment supplementary document submitted with this proposal.