



## **Module Specification**

### **Audio for Games**

Version: 2023-24, v4.0, 23 May 2023

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## Part 1: Information

**Module title:** Audio for Games

**Module code:** UFCFA6-15-3

**Level:** Level 6

**For implementation from:** 2023-24

**UWE credit rating:** 15

**ECTS credit rating:** 7.5

**Faculty:** Faculty of Environment & Technology

**Department:** FET Dept of Computer Sci & Creative Tech

**Partner institutions:** None

**Field:** Computer Science and Creative Technologies

**Module type:** Module

**Pre-requisites:** None

**Excluded combinations:** None

**Co-requisites:** None

**Continuing professional development:** No

**Professional, statutory or regulatory body requirements:** None

## Part 2: Description

**Overview:** The module will enable students to engage with aspects of developing sound for games. From the recording of Foley, dialogue and sound effects, to asset management, generative techniques, game development and production processes. Some knowledge and skills in sound design & post-production are desirable.

**Features:** Not applicable

**Educational aims:** See Learning Outcomes.

**Outline syllabus:** Games development and production:

Typical games development roles. Development workflow. Platforms: desktop computers, consoles and handheld devices. Development systems: game engines, middleware.

## Asset management:

Audio assets: copyright and licensing. Naming systems and databases. Audio compression formats.

## Dialogue production:

Recording dialogue. Actor selection and direction. Localisation of audio assets in games (i.e., multiple languages).

## Generative techniques:

Terminology: generative, interactive, adaptive, non-linear. Stochastic techniques: randomness, probability, weighted randomness / probabilities distributions, Markov models. Algorithmic techniques: rules, linear mapping, exponential mapping, arbitrary mapping.

## Generative music:

History of interactive, generative and stochastic music. Applying generative techniques to music.

## Interactive sound effects:

Recording Foley and other sound effects. Sound design. Making believable sound effects in an interactive or game context. Applying generative techniques to sound effects. Controlling continuous sounds: wind, rain, engines. Triggering sounds: weapons, footsteps, thunder, doors.

## Testing and quality:

Importance of testing. Test suites. User testing. Quality control.

**Part 3: Teaching and learning methods**

**Teaching and learning methods:** Theoretical and conceptual aspects of the module will be introduced by lecture on a weekly basis and, where appropriate, contextualised with practical demonstrations of application. Relevant reading material and sections from the course text should be read in preparation for each lecture.

Learners will apply the conceptual elements of taught material in weekly practical sessions where abilities in problem solving and implementation surrounding audio technology concepts will be developed. Learners are required to complete exercises, extend ideas, and develop further understanding independently of the timetabled sessions.

**Module Learning outcomes:** On successful completion of this module students will achieve the following learning outcomes.

**MO1** Record, edit and prepare dialogue assets for playback in an interactive context such that the flow of speech is natural and believable

**MO2** Select, assemble and process sound effects assets for a range of game oriented sound types

**MO3** Utilise game audio middleware tools to implement believable soundscapes in games with specific reference to mixing, 3D audio behaviour and randomisation of appropriate parameters

**MO4** Deconstruct musical material for interactive playback to create dynamic soundtracks

**Hours to be allocated:** 150

**Contact hours:**

Independent study/self-guided study = 114 hours

Face-to-face learning = 36 hours

Total = 150

**Reading list:** The reading list for this module can be accessed at [readinglists.uwe.ac.uk](https://uwe.rl.talis.com/modules/ufcfa6-15-3.html) via the following link <https://uwe.rl.talis.com/modules/ufcfa6-15-3.html>

## **Part 4: Assessment**

**Assessment strategy:** A portfolio of assignments will be used to assess learners' practical skills in the application of music and audio technology systems. This will involve demonstrating an ability to create an extended piece of work beyond the examples seen in lectures and practicals. The assignment activities will be staged in order to allow progressive development of skills and understanding.

Formative assessment will be provided as part of the practical sessions. Individual feedback will be provided on the assignment and presentation.

Assessment criteria will be supplied with the assignment specification.

### **Assessment tasks:**

#### **Portfolio (First Sit)**

Description: Game audio portfolio

Weighting: 100 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4

#### **Portfolio (Resit)**

Description: Game audio portfolio

Weighting: 100 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4

## Part 5: Contributes towards

This module contributes towards the following programmes of study:

Creative Music Technology [Sep][FT][Frenchay][3yrs] BSc (Hons) 2021-22

Audio and Music Technology [Sep][FT][Frenchay][3yrs] BSc (Hons) 2021-22

Audio and Music Technology [Sep][SW][Frenchay][4yrs] BSc (Hons) 2020-21

Creative Music Technology [Sep][SW][Frenchay][4yrs] BSc (Hons) 2020-21

Audio and Music Technology {Foundation} [Sep][FT][Frenchay][4yrs] BSc (Hons)  
2020-21

Audio and Music Technology {Foundation} [Sep][SW][Frenchay][5yrs] BSc (Hons)  
2019-20