Module Descriptor

Title	Interactive Audio		
Session	2025/26	**Status**	Normal
Code	COMP10009	**SCQF Level**	10
Credit Points	20	**ECTS (European Credit Transfer Scheme)**	10
School	**Computing, Engineering and Physical Sciences**		
Module Co-ordinator	Christopher Fisher		

Summary of Module

This module develops advanced creative and technical skills in the design and implementation of audio for interactive media, with a focus on video games. Students will explore the aesthetic and functional roles of sound in non-linear environments, including techniques for adaptive sound design, spatialisation, and audio triggering. Working in a lab-based environment, students will create, manipulate, and integrate audio assets using professional middleware to support responsive audio behaviours. The module combines theoretical input with practical, hands-on activities that reflect contemporary industry workflows, enhancing students' critical listening, technical fluency, and creative decision-making in interactive sound design.

Aspects which will be discussed include:

- Matching of scores, sound effects and dialogue to the game
- Strategies to reduce repetition in games audio
- Matching sounds to the state of a game
- Creating a mix of spatial sound to enhance the immersive gaming experience
- Creating trigger sounds
- Game Audio Tools
- Sound Synthesis
- Conditional Logic

This module embeds the key "I am UWS" graduate attributes and in particular: Universal (Critical Thinker, Collaborative), Work Ready (Potential leader, Effective communicator, Digitally Literate, Problem-solver) and Successful (Innovative, Creative, Transformational).

Module Delivery Method	On-Campus[1] ☐	Hybrid[2] ☒	Online[3] ☐	Work -Based Learning[4] ☐
Campuses for Module Delivery	☐ Ayr ☐ Dumfries	☐ Lanarkshire ☐ London ☒ Paisley	☐ Online / Distance Learning ☐ Other (specify)	

Terms for Module Delivery	Term 1 ☐		Term 2 ☒	Term 3 ☐	
Long-thin Delivery over more than one Term	Term 1 – Term 2 ☐		Term 2 – Term 3 ☐	Term 3 – Term 1 ☐	

Learning Outcomes	
L1	Critically evaluate and apply established and emerging concepts, techniques, and approaches in the design of interactive audio systems.
L2	Design, create, and implement audio content for non-linear media, demonstrating originality and technical competence in interactive sound design.
L3	Demonstrate an advanced understanding of adaptive audio behaviours through the integration of audio assets using logic-based systems and parameter-driven workflows.
L4	Communicate design, aesthetic, and technical decisions effectively through appropriate forms of documentation, reflection, and presentation.
L5	Exercise autonomy, initiative, and professional responsibility when managing individual and group-based interactive audio projects.

Employability Skills and Personal Development Planning (PDP) Skills	
SCQF Headings	**During completion of this module, there will be an opportunity to achieve core skills in:**
Knowledge and Understanding (K and U)	**SCQF 10** Demonstrate and/or work with knowledge that covers and integrates most of the principal areas, and terminology of computer games audio and display a critical understanding of the principal concepts and constraints which apply to computer games audio.
Practice: Applied Knowledge and Understanding	**SCQF 10** Use a range of the principal skills and practices associated with sound recording and production and apply these in the specialized area of

[1] Where contact hours are synchronous/ live and take place fully on campus. Campus-based learning is focused on providing an interactive learning experience supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus contact hours will be clearly articulated to students.

[2] The module includes a combination of synchronous/ live on-campus and online learning events. These will be supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus and online contact hours will be clearly articulated to students.

[3] Where all learning is solely delivered by web-based or internet-based technologies and the participants can engage in all learning activities through these means. All required contact hours will be clearly articulated to students.

[4] Learning activities where the main location for the learning experience is in the workplace. All required contact hours, whether online or on campus, will be clearly articulated to students

	computer games audio. Practice games audio using existing games including some produced at a professional level.
Generic Cognitive skills	**SCQF 10** Offer professional level insights, interpretations and solutions to problems and issues. Critically review and consolidate knowledge, skills and practices and thinking in computer games audio. Demonstrate some originality and creativity in dealing with professional level issues.
Communication, ICT and Numeracy Skills	**SCQF 10** Apply a range of techniques to incorporate audio into games using a computer games audio engine in current mainstream industry use.
Autonomy, Accountability and Working with Others	**SCQF 10** Exercise autonomy and initiative in professional equivalent activities.

Prerequisites	**Module Code** COMP08064	**Module Title** Recording and Production 2
	Other Or equivalent prior experience of sound production	
Co-requisites	**Module Code** N/A	**Module Title** N/A

Learning and Teaching	
In line with current learning and teaching principles, a 20-credit module includes 200 learning hours, normally including a minimum of 36 contact hours and maximum of 48 contact hours. The module combines formal lectures, software demonstrations, guided software laboratories and personal reading.	
Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	**Student Learning Hours** (Note: Learning hours include both contact hours and hours spent on other learning activities)
Tutorial / Synchronous Support Activity	12
Laboratory / Practical Demonstration / Workshop	36
Independent Study	152
n/a	
n/a	
n/a	
TOTAL	200

Indicative Resources
The following materials form essential underpinning for the module content and ultimately for the learning outcomes: • FMOD (Game Audio Middleware)

• Pro Tools / Logic / Ableton / Cubase • Sonnenschein, D. (2009). Sound Design: The Expressive Power of Music, Voice, and Sound Effects in Cinema. • Phillips, W. (2017). A Composer's Guide to Game Music. • Robinson, C. (2019). Game Audio with FMOD and Unity. Routledge.
(N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)

Attendance and Engagement Requirements
In line with the Student Attendance and Engagement Procedure, Students are academically engaged if they are regularly attending and participating in timetabled on-campus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time. **For the purposes of this module, academic engagement equates to the following:** The School of Computing, Engineering and Physical Sciences considers attendance and engagement to mean a commitment to attending, and engaging in, timetabled sessions. You will scan your attendance via the scanners each time you are on-campus and you will log in to the VLE several times per week. Where you are unable to attend a timetabled learning session due to illness or other circumstance, you should notify the Programme Leader that you cannot attend. Across the School, an 80% attendance threshold is set. If you fall below this, you will be referred to the Student Success Team to see how we can best support your studies.

Equality and Diversity
The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: UWS Equality, Diversity and Human Rights Code. Aligned with the University's commitment to equality and diversity, this module supports equality of opportunity for students from all backgrounds and learning needs. Using the VLE, material will be presented electronically in formats that allow flexible access and manipulation of content. This module complies with University regulations and guidance on inclusive learning and teaching practice. This module has lab-based teaching and as such you are advised to speak to the Module Co-ordinator to ensure that specialist assistive equipment, support provision and adjustment to assessment practice can be put in place, in accordance with the University's policies and regulations.
(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)

Supplemental Information

Divisional Programme Board	**Computing**
Overall Assessment Results	☐ **Pass / Fail** ☒ **Graded**
Module Eligible for Compensation	☐ **Yes** ☒ **No** **If this module is eligible for compensation, there may be cases where compensation is not permitted due to programme accreditation requirements. Please check the associated programme specification for details.**
School Assessment Board	Creative Computing

Moderator	Robert Goldie
External Examiner	N Aurriccio
Accreditation Details	JAMES
Module Appears in CPD catalogue	☐ **Yes** ☒ **No**
Changes / Version Number	3.0

Assessment (also refer to Assessment Outcomes Grids below)
Assessment 1
Audio specification planning and audio development (50%)
Assessment 2
Audio implementation and documentation (50%)
Assessment 3
(N.B. (i) Assessment Outcomes Grids for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed. (ii) An indicative schedule listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.)

Component 1							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Written Plan & Portfolio	☒	☒	☐	☒	☐	50	4

Component 2							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Portfolio & Evaluation	☐	☐	☒	☐	☒	50	4

Component 3							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
	☐	☐	☐	☐	☐		
Combined total for all components						100%	8 hours

Change Control

What	**When**	**Who**

Updated to 2025/26 template and updated delivery/component/learning outcomes.	24/03/2025	Christopher Fisher