University of the West of Scotland

Module Descriptor

Session: 2023/24

Title of Module: Spatial Audio Production			
Code: COMP11126	SCQF Level: 11 (Scottish Credit and Qualifications Framework)	Credit Points: 20	ECTS: 10 (European Credit Transfer Scheme)
School:	School of Computing, Engineering and Physical Sciences		
Module Co-ordinator:	Colin Grassie		

Summary of Module

This module is designed to develop students' knowledge and understanding of the creative and technical aspects of spatial sound design and surround-sound audio post-production, including 3D audio production workflows and recommended industry delivery parameters for the digital distribution of a range of output formats.

Students will explore spatial audio capture techniques and the acquisition and development of additional sound assets, which may include music. These assets will combine to provide project materials for the realisation of a professional immersive audio-media product that aims to produce a realistic and immersive auditory impression for a listener.

Students' initial investigation will identify a thematic focus for a project and develop a project specification, including time-lined planning and design criteria, in agreement with the module coordinator (tutor/supervisor), thus affording a student-centred experience.

Students will critically evaluate the relationships between sound design and/or music enhancing both the immersive experience and creative production practice.

Within the module the main topics are:

1. Project Design and Specification

2. 3D Audio Asset Development

3. Creative Immersive Sound Production

4. Final formatting and rendering

Module Delivery Method

Face-To-Face	Blended	Fully Online	Hybrid C	Hybrid 0	Work-Based Learning
☐	☒	☐	☐	☐	☐

Hybrid C
Online with mandatory face-to-face learning on Campus

Campus(es) for Module Delivery						
The module will **normally** be offered on the following campuses / or by Distance/Online Learning: (Provided viable student numbers permit) (tick as appropriate)						
Paisley:	Ayr:	Dumfries:	Lanarkshire:	London:	Distance/Online Learning:	Other:
☒	☐	☐	☐	☐	☐	Add name

Term(s) for Module Delivery					
(Provided viable student numbers permit).					
Term 1	☒	Term 2	☐	Term 3	☐

Learning Outcomes: (maximum of 5 statements)
These should take cognisance of the SCQF level descriptors and be at the appropriate level for the module.
At the end of this module the student will be able to:

L1	Work with knowledge, and a critical awareness of new insights, much of which is at, or informed by, the forefront of spatial audio technology and professional practice in 3D sound production.
L2	Apply knowledge, skills and understanding using a range of specialised skills, techniques, and materials at all stages of the production process of a spatial audio project informed by forefront developments.
L3	Critically evaluate methodologies and, where appropriate, propose new hypotheses and extend knowledge, skills, practices and thinking in creative 3D sound production.
L4	Demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level through the realisation of a practical project from concept to delivery.
L5	Click or tap here to enter text.

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 Level **11** Students will gain comprehensive experience and understanding of the processes of spatial audio production practice. Students will gain a critical understanding of specific theories, principles, concepts related to spatial audio production.
Practice: Applied Knowledge and Understanding	SCQF Level **11** Students will use a wide range of the principal skills, techniques and practices associated with spatial audio production and immersive experience. Students will practice in a wide variety of professional contexts including working to a project brief that requires original sound design that addresses acoustical and psychoacoustic principles.
Generic Cognitive skills	SCQF Level **11** Students will develop original and creative responses to problems and issues in technical and creative processes. Students will critically review, consolidate, and extend knowledge, skills, practices and thinking in creative spatial sound production through project design, planning and final realisation.
Communication, ICT and Numeracy Skills	SCQF Level **11** Students will use a range of software, and hardware configuration, to support creative and technical work, including a range of third-party software and computer-based audio technologies.
Autonomy, Accountability and Working with others	SCQF Level **11** Students will demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level through a substantial individual project. Students will engage in the completion and realisation of a final project from concept to delivery where they may be required to collaborate and work with others such as musicians and artists.
Pre-requisites:	Before undertaking this module, the student should have undertaken the following:

Module Code:	**Module Title:**
Other:	

Co-requisites	Module Code:	Module Title:

*Indicates that module descriptor is not published.

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.	
Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	**Student Learning Hours** (Normally totalling 200 hours): (Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture/Core Content Delivery	12
Tutorial/Synchronous Support Activity	12
Laboratory/Practical Demonstration/Workshop	24
Independent Study	152
Choose an item.	
Choose an item.	
Choose an item.	
Choose an item.	
Choose an item.	
	200 Hours Total
**Indicative Resources: (eg. Core text, journals, internet access)	

The following materials form essential underpinning for the module content and ultimately for the learning outcomes:

Paterson, J. and Lee, H., (2021). 3D Audio (Perspectives on Music Production). 1st ed. Routledge.

Roginska, A. and Geluso, P., (2017). Immersive Sound: The Art and Science of Binaural and Multi-Channel Audio. 1st ed. Routledge.

Corey, J. and Benson, D.H. (2017) *Audio production and critical listening: Technical ear training*. New York: Routledge, Taylor & Francis Group.

Please ensure the list is kept short and current. Essential resources should be included, broader resources should be kept for module handbooks / Aula VLE.

Resources should be listed in Right Harvard referencing style or agreed professional body deviation and in alphabetical order.

(**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:

Regularly engaged with timetabled teaching sessions, course-related learning resources including those in the library and on the relevant learning platform, and complete assessments and submit these on time.

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.

Please ensure any specific requirements are detailed in this section. Module Co-ordinators should consider the accessibility of their module for groups with protected characteristics..

(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
Assessment Results (Pass/Fail)	Yes ☐No ☒
School Assessment Board	Creative Computing
Moderator	Christopher Fisher
External Examiner	N. Auricchio
Accreditation Details	TBC
Changes/Version Number	1

Assessment: (also refer to Assessment Outcomes Grids below)
Assessment 1 (Category 40%): Written: Critique (and Project Specification)
Assessment 2 (Category 60%): Creative Output
(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.)

Assessment Outcome Grids (See Guidance Note)

Component 1							
Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Written			✔	✔			4

Component 2							
Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Creative Output	✔	✔					12

Component 3							
Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Combined Total for All Components						100%	16 hours

Change Control:

What	When	Who
Further guidance on aggregate regulation and application when completing template	16/01/2020	H McLean
Updated contact hours	14/09/21	H McLean
Updated Student Attendance and Engagement Procedure	19/10/2023	C Winter
Updated UWS Equality, Diversity and Human Rights Code	19/10/2023	C Winter
Guidance Note 23-24 provided	12/12/23	D Taylor
General housekeeping to text across sections. .	12/12/23	D Taylor

Version Number: MD Template 1 (2023-24)