MODULE SPECIFICATION

Module Code:	CMT403

Module Title:	Live Sound

Level:	4	**Credit Value:**	20

Cost Centre(s):	GACT	JACS3 **code**: HECoS code:	J930 100222

Faculty	Arts, Science and Technology	**Module Leader:**	Colin Heron

Scheduled learning and teaching hours	48 hrs
Guided independent study	152 hrs
Placement	0 hrs
Module duration (total hours)	200 hrs

Programme(s) in which to be offered (not including exit awards)	Core	Option
BSc (Hons) Sound Technology	✓	☐
BSc (Hons) Music Technology	✓	☐
BSc (Hons) Professional Sound and Video	✓	☐
BSc (Hons) Live Sound	✓	☐

Pre-requisites

Office use only

Initial approval: September 16 Version no:1

With effect from: 01/09/2019

Date and details of revision: Reapproved by AB 13/03/18 as part of reval for BSc (Hons) Live Sound Version no:2

Module Aims

The content of this module is an introduction to live sound production as applied to the touring and installation sound system professional. The theory concentrates on the design and operation of medium to large-scale public address systems. It develops the student's appreciation of the key elements that are required in a high quality sound system and furnishes them with the required skills to play an active part in a live sound company or production team.

Intended Learning Outcomes

Key skills for employability

KS1	Written, oral and media communication skills
KS2	Leadership, team working and networking skills
KS3	Opportunity, creativity and problem solving skills
KS4	Information technology skills and digital literacy
KS5	Information management skills
KS6	Research skills
KS7	Intercultural and sustainability skills
KS8	Career management skills
KS9	Learning to learn (managing personal and professional development, self-management)
KS10	Numeracy

At the end of this module, students will be able to		Key Skills	
1	Appraise the environmental factors that limit the effectiveness of available technology.	KS1	KS3
		KS6	
2	Design and specify technological solutions for a variety of sound reinforcement applications.	KS3	KS6
		KS7	KS9
		KS10	
3	Work as a team member on a live sound event and understand the roles of the associated team members.	KS2	KS3
		KS8	
4	Apply the procedures and techniques for producing and engineering live events to a professional technical and creative standard.	KS4	KS5
		KS9	

Transferable skills and other attributes

The ability to interpret technical specifications
Problem solving in a work based environment
Ability to work as part of a team
Communication skills

Derogations

None

Assessment:

Indicative Assessment Tasks:

1. The student will conceive and design a sound system for a given application. The design will cover all aspects of the application from the supply of the components to any health and safety considerations.

2. The student will work as part of a small team that will build and operate a medium scale public address system. This will be assessed through a practical timed test of installing a live sound rig that needs to be fit for the given technical specification. The timing will be comparable to that expected in an industrial situation.

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)	Duration or Word count (or equivalent if appropriate)
1	1,2,4	Project	70	2000
2	3	Simulation	30	30 minutes

Learning and Teaching Strategies:

The module will be presented as a series of lectures linked to practical sessions with the associated equipment.
Seminars will be conducted to explore the applied use of the technology.
Group collaboration will be encouraged to emphasise the importance of teamwork within the live sound industry.

Syllabus outline:

Live systems in context
Health and safety
System topography
Live mixing consoles (digital and analogue)
Graphic equalisation
Crossovers and loudspeaker system control
Low frequency transducers
High frequency transducers
Line Array
Computer modelling and control
System calibration and optimisation
System measurement utilising FFT

Indicative Bibliography:

Essential reading

Davis, D. & Patronis, E, (2006). Sound System Engineering. Focal Press.
Eargle, J. & Foreman, C. (2008). Jbl Audio Engineering for Sound Reinforcement . Kendrick Books.
Gibson, B. (2011). The ultimate live sound operators handbook . Hal Leonard Books.

Other indicative reading

Davis, G. Jones R, (1990). Sound Reinforcement Handbook. Hal Leonard Corp.
Stark, S (2002). Live Sound Reinforcement; Hal Leonard Corp.
Audio Engineering Society – Journal and e-Library http://www.aes.org