Wrexham Glyndŵr UNIVERSITY

MODULE SPECIFICATION PROFORMA

Module Title:	Live Sound	**Level**:	4	**Credit Value**:	20

Module code:	CMT403	**Is this a new module?**	No	**Code of module being replaced**:	N/A

Cost Centre:	GACT	**JACS3 code**:	J930	

Trimester(s) in which to be offered:	2	**With effect from:**	September 16

School:	Creative Arts	**Module Leader:**	Colin Heron

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

Programme(s) in which to be offered	Core	Option
BSc (Hons) Sound Technology	☑	☐
BSc (Hons) Music Technology	☑	☐
BSc (Hons) Professional Sound and Video	☑	☐

Pre-requisites
None

Module Aims
Guidance: Include any skills and attributes which may be developed, but are not necessarily assessed (200 words maximum)
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
Guidance: These ILOs are assessed and can be discipline cognitive abilities and skills (including the knowledge domain in which they are exercised); psychomotor (manual) skills, values and attitudes or generic key skills. Typically, a 20 credit module would have not more than about 6 ILOs. The text of each ILO should consist of an active verb (the knowledge processing eg analyse), the content or subject of the knowledge and the context and/or level of performance. Learning outcomes should reflect the level descriptors in the QAA Quality Code Part A; Setting and maintaining threshold academic standards. Guidance on writing ILOs is on the TLC website (https://glynfo.glyndwr.ac.uk/course/view.php?id=127> Sharing Effective Practice)

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		KS2	KS3

	Work as a team member on a live sound event and understand the roles of the associated team members.	KS8	
4	Apply the procedures and techniques for producing and engineering live events to a professional technical and creative standard.	KS4	KS5
		KS9	

Transferable/key 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
Guidance: Enter any derogations that apply to this module and that have been approved by SQC (200 words maximum).
None

Assessment:

Guidance: Please give details of indicative assessment tasks below.

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.

Guidance: Please indicate the type(s) of assessment (eg examination, oral, coursework, project) and the weighting of each (%). Normally, each intended learning outcome should be assessed only once.

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)	Duration (if exam)	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

Bibliography:
Essential reading
Guidance: These titles form an essential part of the course. Students are expected to draw on these titles as a core part of their learning experience and in order to complete assignments satisfactorily. No more than three or four texts should be set for each module and electronic resources should be included if appropriate. *Programme leaders should clearly indicate where students would be expected to purchase items for themselves. The library will, **wherever possible,** keep one copy of each in stock on restricted loan for students to consult.*
Gibson, B. (2011) The ultimate live sound operators handbook . Hal Leonard Books. Eargle, J. Foreman, C. (2008) Jbl Audio Engineering for Sound Reinforcement . Kendrick Books. Davis, D. Patronis, E, (2006) Sound System Engineering. Focal Press.
Other indicative reading
Guidance: These are titles which supplement or enhance core reading. Students should be encouraged to make use of the library catalogue or other databases to identify further reading. *Reading lists should be submitted by June to guarantee availability for September. Please contact your Learning Resource Advisor for further information.*
Davis, G. Jones R, (1990). Sound Reinforcement Handbook. Hal Leonard. Stark, S (2002). Live Sound Reinforcement; Hal Leonard Audio Engineering Society – Journal and e-Library http://www.aes.org