

Liverpool John Moores University

Title: LIVE SOUND
Status: Definitive
Code: **4504MPSH** (116186)
Version Start Date: 01-08-2011

Owning School/Faculty: Liverpool School of Art & Design
Teaching School/Faculty: St Helens College

| Team | Leader |
|------------------|--------|
| Stuart Borthwick | Y |

Academic Level: FHEQ4 **Credit Value:** 24.00 **Total Delivered Hours:** 77.00

Total Learning Hours: 240 **Private Study:** 163

Delivery Options

Course typically offered: Standard Year Long

| Component | Contact Hours |
|-----------|---------------|
| Lecture | 20.000 |
| Practical | 15.000 |
| Tutorial | 15.000 |
| Workshop | 26.000 |

Grading Basis: 40 %

Assessment Details

| Category | Short Description | Description | Weighting (%) | Exam Duration |
|----------|-------------------|-------------------------------------|---------------|---------------|
| Essay | AS1 | A 3000 word written assignment | 40.0 | |
| Exam | AS2 | Exam | 20.0 | 1.00 |
| Report | AS3 | A practical task analysis situation | 40.0 | |

Aims

To develop an understanding of appropriate processes/procedures employed within a 'Live Sound' environment. Recognise how the tasks to support performance are formalised into technical roles. Introduce the learner to loudspeaker enclosure placements, installation and design. Develop an awareness of acoustic control within

a live performance situation.

Learning Outcomes

After completing the module the student should be able to:

- 1 Gain knowledge and understanding of the appropriate technical requirements for a variety of 'live sound' situations. A7
- 2 Use or describe equalisation effectively with regards to corrective and creative theories. A8
- 3 Control and engineer audio signals from a FOH and Monitor perspective C9
- 4 Understand signal flow/wiring configurations of typical Sound Reinforcement systems. A9

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

| | | | |
|-------------------------|---|---|---|
| 3000 words | 1 | 2 | 4 |
| EXAM | 1 | | |
| practical task analysis | 2 | 3 | 4 |

Outline Syllabus

Health & Safety issues
Terminology
Rigging & De-rigging
Signal flow & wiring configuration
Speaker Design
Speaker placement
Acoustic control within a live environment
Voicing Up/Ringing out
Room Modes (Standing Waves/Nodes/Antinodes)
Mixing consoles FOH/Monitor
Crossovers
Amplifiers
Equalizers
Audio Processor (Configuration & application)
FX Processors (Configuration & application)
FOH & Monitor mixing
Microphone types, choice and placement
Plugs/Jacks/Connectors
Technical Roles

Learning Activities

The Module will consist of a combination of lectures, academic tutorials, individual/group workshops, video presentations and demonstrations.

References

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|------------------------|--|
| Course Material | Book |
| Author | Buick, P. |
| Publishing Year | 1996 |
| Title | Live Sound PA for Performing Musicians |
| Subtitle | |
| Edition | |
| Publisher | PC Publishing |
| ISBN | |

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|------------------------|--------------------------|
| Course Material | Book |
| Author | Davis, D. & Davis, C. |
| Publishing Year | 1997 |
| Title | Sound System Engineering |
| Subtitle | |
| Edition | 2nd ed. |
| Publisher | Focal Press |
| ISBN | |

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|------------------------|----------------------------------|
| Course Material | Book |
| Author | Davis, G. & Jones, R. |
| Publishing Year | 1988 |
| Title | The Sound Reinforcement Handbook |
| Subtitle | |
| Edition | |
| Publisher | Yamaha Products |
| ISBN | |

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|------------------------|-----------------------|
| Course Material | Book |
| Author | Fry, D. |
| Publishing Year | 1992 |
| Title | Live Sound Mixing |
| Subtitle | |
| Edition | 2nd ed. |
| Publisher | Roztralia Productions |
| ISBN | |

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|------------------------|-------------------------------|
| Course Material | Book |
| Author | Gibson, B. |
| Publishing Year | 2007 |
| Title | Live Sound Operators Handbook |

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|------------------|-------------|
| Subtitle | |
| Edition | |
| Publisher | Hal Leonard |
| ISBN | |

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|------------------------|-------------------------------|
| Course Material | Book |
| Author | Huber, D. M. & Runstein, R.E. |
| Publishing Year | 1995 |
| Title | Modern Recording Techniques |
| Subtitle | |
| Edition | 5th ed. |
| Publisher | Focal Press |
| ISBN | |

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|------------------------|--------------------------|
| Course Material | Book |
| Author | Stark, S.H. |
| Publishing Year | 2002 |
| Title | Live Sound Reinforcement |
| Subtitle | |
| Edition | |
| Publisher | Mix Books |
| ISBN | |

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|------------------------|--------------------------|
| Course Material | Book |
| Author | White, P. |
| Publishing Year | 2000 |
| Title | Basic Live Sound |
| Subtitle | |
| Edition | |
| Publisher | Sanctuary Publishing LTD |
| ISBN | |

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|------------------------|--|
| Course Material | Book |
| Author | White, P. |
| Publishing Year | 1998 |
| Title | Live Sound For The Performing Musician |
| Subtitle | |
| Edition | |
| Publisher | Sound on Sound |
| ISBN | |

Notes

The Module will explore the basics of live sound, both in terms of theory and professional practice. The components and configuration of a professional sound reinforcement system will be explored, both in the classroom and in practical

sessions in the Citadel Arts Centre, which has a suitable P.A. system for the learner to gain practical experience in a professional setting. Key tasks in professional sound engineering practice, such as voicing up and ringing out, and setting up a monitor mix, will be explored in the Module, again both in the classroom and in practical sessions. The practical task analysis assessment will take place in the Citadel Arts Centre, St Helens.