Essential Sound

Module Information

2022.01, Approved

Summary Information

Module Code	4538TPR
Formal Module Title	Essential Sound
Owning School	Liverpool Screen School
Career	Undergraduate
Credits	10
Academic level	FHEQ Level 4
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

Partner Teaching Institution

Institution Name
Liverpool Institute for Performing Arts

Learning Methods

Learning Method Type	Hours
Lecture	17
Practical	12
Seminar	2
Tutorial	1
Workshop	13

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
SEP-PAR	PAR	September	28 Weeks

Aims and Outcomes

Aims	This Module is a ground up introduction to the basic theories, skills and technologies used in theatre sound reinforcement and design. This will allow students the opportunity to translate creative need into technological achievement and will equip them with a broad range of skills and understanding. Students will learn safe working practice and be introduced to the professional standards of work required to gain and maintain employment as a sound technician or designer as well as the different roles within a professional sound crew, their responsibilities and how they relate to each other. Standard processes and techniques will be examined as will the appropriate planning documentation required for a successful production. The module will introduce the various technical components of a sound reinforcement system and provide a clear set of methodologies for its design, implementation and optimisation.

After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Examine physical and acoustic principles in relation to live sound, recording and reproduction to develop a good theoretical knowledge
MLO2	2	Experiment with the recording, editing and playback of music, speech and FX using both analogue and digital systems to develop effective skills in sound reproduction
MLO3	3	Design, rig, optimize and operate a small PA system for use within a theatrical performance environment
MLO4	4	Examine Health & Safety issues relating to sound reinforcement systems and value the ability to work well in a team
MLO5	5	Recognise the processes involved in sound design for theatre and the roles and responsibilities of key personnel in a theatrical sound department

Module Content

Outline Syllabus	The physics of sound; Amplitude, frequency and timbre. Sound transmission and speed; Wave motion and wave forms; Wavelength and its relationship to frequency. Basic Acoustic considerations. Introduction to basic sound reinforcement systems; system components - architecture, operation, relationships and uses, interconnections; signal flow and gain structure; safe working practices; A look at some of the sound reinforcement equipment available. Health and safety issues relating to sound reinforcement. Console architecture, gain structure and routing. Introduction to monitors for live sound. System set-up, connections, patching and balance. Introduction to theatre sound design, system design and operation. Special considerations and concepts; roles within the sound department. Microphone theory and practice. Introduction to analogue and digital recording/playback principles and systems; Digital recording and editing. Getting it down on paper - Plots, plans, cues and running a show. Planning exercise.Interpersonal skills and teamwork. Speaker design, amplifiers and impedance. Logical fault finding and testing. FX processors and FX loops. Production exercises.Exam technique. Production rehearsals and tutorials.
Module Overview	
Additional Information	Notes - Examination - one hour written paper comprising of short essay questions on acoustic theory, sound reinforcement and recording systems, the roles, methodologies and issues of working with sound in a live theatrical context. (Chris Layton is the Module Leader)

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Exam	Exam (one hour)	30	1	MLO1, MLO5
Practice	Coursework Assignment	70	0	MLO4, MLO5, MLO2, MLO3

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings

Partner Module Team

Contact Name	Applies to all offerings	Offerings