Desktop Audio 1

Module Information

2022.01, Approved

Summary Information

Module Code	4522STE
Formal Module Title	Desktop Audio 1
Owning School	Engineering
Career	Undergraduate
Credits	20
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	30
Tutorial	2
Workshop	40

Module Offering(s)

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

Aims and Outcomes

Aims	This module provides students with a practical and theoretical introduction to the paradigm of desktop recording and production. Starting with MIDI applications, students will be introduced to the MIDI protocol and the use of industry standard sequencing packages. They will then progress to using non-linear recording and editing systems such as ProTools, and finally investigate the integration of audio and MIDI capabilities in modern sequencers.Although the software and hardware systems have strong links with creating and producing music, being a musician is not a prerequisite for this module. Instead teaching and learning activities are presented in a manner designed to develop students' operational skills and understanding of these systems, and become creative in their application of them.

After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Identify and describe the data structure of MIDI and the underlying technologies of Desktop Audio systems
MLO2	2	Use a non-linear recording and editing package to competently and confidently record and edit audio
MLO3	3	Produce an audio mix to a defined brief that integrates audio and MIDI in a single platform within the confines of the desktop environment.

Module Content

Outline Syllabus	MIDI History The development of MIDI; MIDI precursors – CV & Gate; Initial MIDI specification; early and subsequent uses.MIDI routing MIDI connections – In Out & Thru; The MIDI signal flow; MIDI fault-finding; AMS setup, interface types and applications; MIDI network topologies – daisy-chain vs. star networking; MIDI routing software layers; configuring routing software; sharing MIDI between software packages on the same computer.MIDI StructureSpeed of MIDI; MIDI data structure; reading and using hexadecimal and binary in conjunction with MIDI; Channel messages; Note specific messages; Non-note messages; System messages.Basic principles of sequencing; basic recording and playback of MIDI data; manipulating MIDI data – list, grid and drum editors, data filtering, quantising note data, using and editing controller data; operation and use of industry standard sequencing packages; MIDI data export and import.Non-Linear Recording and Editing Fundamental principles of non-linear recording; hard disc systems and types; audio file formats –AIFF, BWAV; sample rate and bit depth; operation and use of typical NLE; editing conventions and techniques; DSP operations – plug-in types and architectures; real and non-real time FX; automation; integrating audio and MIDI capabilities – audio instruments, bouncing audio to disk; audio file management and housekeeping; backup and restore options.
Module Overview	
Additional Information	Mark Atherton is the Module Leader (m.atherton@lipa.ac.uk)

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Practice	Practical Project	60	0	MLO2, MLO3
Exam	Written Exam	40	1.5	MLO1

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings

Partner Module Team

Contact Name	Applies to all offerings	Offerings