

Full Title:	Studio Environment
Language of Instruction:	English
Module Code:	MUSC U8151
Credits:	10
Valid From:	Semester 1 - 2014/15 (September 2014)
Module Delivered in	1 programme(s)
Module Description:	This module aims to give the student an introduction to the procedural, technical and physical aspects of a typical recording studio and its associated performance spaces. It aims to further the student's understanding of the operation and configuration of large format mixing consoles and basic electronic principles governing the selection, configuration and interconnection of equipment in the studio.
Learning Outcomes:	
<i>On successful completion of this module the learner should be able to</i>	
<ol style="list-style-type: none"> 1. Summarise the technical and physical infrastructure and the principle equipment interconnections of a professional recording studio. 2. Differentiate between the desired acoustic requirements for the control room and those for the performances spaces. 3. Configure a Large Format console for recording, overdubbing, mixing and tracking session communications. 4. Demonstrate best practice procedures and protocols for behavior in the studio, managing a recording session, equipment & inventory management 5. Use basic electronic measurement techniques and analyse the resulting output 6. Assess a basic schematic diagram. 	

Module Content & Assessment

Indicative Content
<p>Technical architecture of a Recording Studio The core machine/equipment requirements and interconnections of a recording studio control room.</p>
<p>Acoustic considerations The preferred acoustic characteristics for the control room and the performance spaces, acoustic treatment requirement. Overview of large format mixing console topology s and options, variable acoustics. Channel strip and control section feature sets, direct and group routing, communication strategies, inputs & outputs Source connection options, patch bay configurations, Auxillary sends, insert/return.</p>
<p>Electronics Equipment and interconnection standards: xlr/rca/TT/BNC etc. Measurement and visualization of audio signals. Principles of AC, DC, voltage, current, power resistance, reactance, impedance. Units of Measurement: Decibel, VU, volts, amps, resistance. Basic Maintenance: Soldering, basic measurements and fault finding.</p>
<p>Metering and conventions VU, PPM, dBs, Phase, Spectrum Analysis. Digital and Analogue metering conventions</p>
<p>Procedure Roles & duties of producer, engineer and assistants in the studio. Health & Safety in the studio: listening levels, duration, ear protection. Practical experience of individual studio roles (through mentoring system)</p>

Assessment Breakdown	%
Course Work	60.00%
End of Module Formal Examination	40.00%

Full Time

Course Work							
Assessment Type	Assessment Description	Outcome addressed	% of total	Marks Out Of	Pass Marks	Assessment Date	Duration
Practical/Skills Evaluation	Proficiency in the setting up and operation of a large format console for recording, overdubbing and mixing	3	25.00	0	0	Week 10	0
Practical/Skills Evaluation	"System Fault Finding", Configure Test and Repair a typical system setup, as specified. Producing basic configuration documentation and equipment lists	None	15.00	0	0	Week 12	0
Class Test	"Using Signals" a practical exercise to support class delivered theory	None	10.00	0	0	Week 6	0
Written Report	Observation of studio production practice in action accompanied with a critical report that compares and contrasts what has been observed with acknowledged best practice methods.	1,2,3,4	10.00	0	0	Week 14	0

No Project

No Practical

End of Module Formal Examination							
Assessment Type	Assessment Description	Outcome addressed	% of total	Marks Out Of	Pass Marks	Assessment Date	Duration
Formal Exam	n/a	1,2,3,4,5,6	40.00	0	0	End-of-Semester	0

Reassessment Requirement**A repeat examination**

Reassessment of this module will consist of a repeat examination. It is possible that there will also be a requirement to be reassessed in a coursework element.

DKIT reserves the right to alter the nature and timings of assessment

Module Workload & Resources

Workload: Full Time

Workload Type	Workload Description	Hours	Frequency	Average Weekly Learner Workload
Lecture	Theory and procedural topics content delivery.	1.00	Every Week	1.00
Practical	Hands on experience of studio and electronic equipment.	2.00	Every Week	2.00
Tutorial	Analysis and calculations relating to relevant theoretical issues.	2.00	Every Week	2.00
Directed Reading	No Description	3.00	Every Week	3.00
Independent Study	No Description	4.42	Every Week	4.42
Total Weekly Learner Workload				12.42
Total Weekly Contact Hours				5.00

This course has no Part Time workload.

Resources

Recommended Book Resources

- R. Izhaki 2011, *Mixing audio, Concepts, Practices and Tools*, 2 Ed., Focal Press [ISBN: 9780240522227]
- P. Newell 2011, *Recording Studio Design*, 3 Ed., Focal Press [ISBN: 9780240522401]
- B. Bartlett 2012, *Practical Recording Techniques*, 6 Ed., Focal Press [ISBN: 9780240821535]
- Hechtman 2007, *Audio Wiring Guide, How to wire the most popular audio and video connectors*, Elsevier Science & technology Books [ISBN: 9780240520063]
- McCartney, T. 2004, *Recording Studio Technology , Maintenance and Repairs*, McGraw-Hill Professional [ISBN: 9780071427265]

Recommended Article/Paper Resources

- Williams, A. 2007, *Divide and conquer: power role formation and conflict in recording studio architecture*, Journal on the Art of Record Production, 1
<http://arpjournal.com/343/divide-and-conquer-power-role-formation-and-conflict-in-recording-studio-architecture/>

Other Resources

Website: N/A
<http://www.tapeop.com>

Website: N/A
<http://www.aes.org>

Module Delivered in

Programme Code	Programme	Semester	Delivery
DK_MMPAR_8	Bachelor of Arts (Hons) in the Production of Music and Audio	2	Mandatory