OCR
Oxford Cambridge and RSA

Cambridge **TECHNICALS LEVEL 3**

PERFORMING ARTS

Cambridge
TECHNICALS
2016

Unit 31

Technical management

L/507/6842

Guided learning hours: 60

Version 1 September 2015

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Essential resources required for this unit: Learners will need access to relevant instruments and associated peripherals and technology-focused learners will require appropriate industry-standard DAW sequencing software and associated peripherals or DJ equipment.

This unit is internally assessed and externally moderated by OCR.

UNIT AIM

As a working musician or music technologist, it is essential that the equipment that is used in the music-making process is maintained to a high standard and can be relied upon. The more that you know about your chosen instrument or the technology that you are using, the more confident you can be in ensuring that it can be utilised to a high standard.

This unit will focus on helping you to achieve the all-round competence expected of a typical technician working for smaller bands and studios, and throughout the wider live music industry.

It is expected that you will yourself be a musician or music technologist and indeed it is essential that technical personnel are able to play at least one instrument or use production tools to a reasonable standard.

As a musician you will gain a thorough understanding of how to care for and set up musical instruments and the equipment used for their amplification and enhancement on-stage. As a technologist you will focus on the selection and configuration of a typical DJ/VJ or studio setup.

TEACHING CONTENT

The teaching content in every unit states what has to be taught to ensure that learners are able to access the highest grades.

Anything which follows an i.e. details what must be taught as part of that area of content. Anything which follows an e.g. is illustrative; it should be noted that where e.g. is used, learners must know and be able to apply relevant examples in their work, although these do not need to be the same ones specified in the unit content.

For internally assessed units you need to ensure that any assignments you create, or any modifications you make to an assignment, do not expect the learner to do more than they have been taught, but must enable them to access the full range of grades as described in the grading criteria.

Learning outcomes The Learner will:	Teaching content Learners must be taught:
1. Know the responsibilities of a technical manager	1.1 Responsibilities to crew, e.g. designating roles, hiring staff, designing crew requirements for a production, developing itinerary 1.2 Knowledge of venue, knowledge of required equipment, technical expertise, knowledge of relevant health and safety legislation 1.3 Responsibilities to artist and audience, e.g. safety, conform, legal requirements, e.g. noise regulations, public liability, etc. 1.4 Responsibilities for setting up, maintaining and repairing equipment used in music production or performance, e.g. tuning, fault finding, adjusting MIDI processes
2. Know health and safety practice for a technical manager	2.1 The need for a secure knowledge and understanding of, and compliance with, current health and safety regulations in both general stage applications and the more specific area of working with electrical equipment 2.2 Legislation governing the safety of self and others, i.e.: Health and Safety at Work Act (1974), The Management of Health and Safety at Work Regulations (1999), Control of Noise at Work Regulations, RIDDOR reporting procedures, environmental health legislation; HSE risk management, COSHH, EAW (EOW), Working At Height, Fire regulations
3. Understand an instrument or item of technology for use in music production	3.1 The overall design, replaceable/repairable components and technical function of instruments and how they may be incorporated into backline systems 3.2 How to describe and explain the design and construction of instruments, the parts of instrument and their function, associated peripheral equipment, e.g. guitar amplifier 3.3 To understand the musical functions of instruments, e.g. noise generation, tuning, intonation, how vibrato is created, etc. 3.4 To understand the terminology associated with music production equipment, e.g. waveforms, envelopes, filters, hardware, software, effects, DAW software, hardware requirements, DJ equipment and functionality

Learning outcomes The Learner will:	Teaching content Learners must be taught:
4. Be able to set up and maintain instruments or technology for a music production	4.1 How to set up, maintain and repair instruments and equipment and gain a sound grasp of how to programme sound systems, MIDI and related commercial software packages 4.2 Basic setup of instruments or technology for performance, e.g. tuning, connection to PA or amplification, appropriate settings on amplification or mixer, etc. 4.3 How to carry out first line only maintenance on the systems they build and this should include also the ability to fault find and repair or replace. This should include basic soldering skills and using a basic repair/tool kit 4.4 To understand the adjustment of MIDI processes, including audio signal paths, DAW/DJ equipment and software, and associated devices such as mixers, FX units and DIs

GRADING CRITERIA

LO	Pass	Merit	Distinction
	The assessment criteria are the Pass requirements for this unit.	To achieve a Merit the evidence must show that, in addition to the Pass criteria, the candidate is able to:	To achieve a Distinction the evidence must show that, in addition to the pass and merit criteria, the candidate is able to:
1. Know the responsibilities of a technical manager	P1: Describe the responsibilities of a technical manager		
2. Know health and safety practice for a technical manager	P2: Carry out a risk assessment, giving effective solutions to issues raised	M1: Implement controls to address identified health and safety risks	
3. Understand an instrument or item of technology for use in music production	P3: Describe the design, functions and terminology associated with an instrument or item of technology		
4. Be able to set up and maintain instruments or technology for a music production	P4: Set up and maintain an instrument or item of technology for a music production	M2: Assist in the setup and maintenance of contrasting equipment for a music production	D1: Lead a team to set up and maintain equipment for a music production

ASSESSMENT GUIDANCE

Assessment and Grading Criteria P1

Learners should investigate and produce a report or presentation on the responsibilities of the technical manager. This should be based on factual research and/or case studies. The importance of the role of a prepared and experienced technical manager should be considered as should the impact that the lack of a role would have on a performance or production.

In order to meet **P1**, learners must be able to identify and describe all key responsibilities of the technical manager for their area of interest (i.e. instrumental or technological technical management).

Assessment and Grading Criteria P2, M1

The learner should liaise with venue staff and artists to prepare for a performance. Pass level (**P2**) learners will carry out a risk assessment and correctly identify potential hazards, suggesting effective solutions to address the potential hazards. Merit level (**M1**) learners will perform a risk assessment on a performance space in preparation for a public show and take appropriate measures or mitigating actions to control identified risks. This may be assessed in the form of a simulation where a performance space has been set up by the assessor with identifiable hazards in place.

Assessment and Grading Criteria P3

Learners should investigate the overall design and functionality of their selected instrument or item of music production technology.

Learners should locate and access a series of resources which catalogue a variety of musical styles, available materials, and popular trends and investigate the functionality of the instrument or item of technology and the effect of these on technological and artistic developments in instrument and production technology evolution.

Evidence will be assessed through the production of a document with diagrams or demonstration, where the learner identifies and describes and/or demonstrates the musical and technical functionality of the instrument or production hardware. This could be evidenced by a written document or journal, or video diary. The work should refer to the technology and techniques utilised in the practical application of the equipment and their impact upon the musical world. In order to meet **P3** they must be able to describe all aspects identified in the criteria i.e. the design of, the function/s and the key terminology associated with the instrument or technology they have chosen as their focus of the unit.

Assessment and Grading Criteria P4, M2, D1

The learner is expected to prepare instruments and equipment for a small scale live gig or set-up and/or configure DJ or production technology to a useable standard.

To achieve **P4**, the learner will complete the setup of a selected instrument or item of technology, making adjustment and testing in preparation for performance or recording and explain their process. The learner will be able to undertake basic repair tasks in order to allow the instrument/technology to function. This will be within the remit of basic upkeep of instrumentation/technology and not be of the level where the item would need to be taken to a

specialist. **M2** may be awarded where the learner has undertaken the setup and preparation of a number of instruments or pieces of technology, e.g. a guitarist would not only prepare their instrument for performance, but will also assist in the preparation of a keyboard rig, bass and perhaps elements of the P.A. system. Learners who achieve **D1** will show understanding of all areas of instrumentation or technology being used and coordinate and lead a team in the setup and preparation for the performance.

The above demonstrations will be video recorded as assessment evidence. The supporting explanation(s) may also be in video format or in the form of a written, diagrammatically illustrated account.

MEANINGFUL EMPLOYER INVOLVEMENT - a requirement for the Foundation Diploma and Diploma (Tech Level) qualifications

The 'Diploma' qualifications have been designed to be recognised as Tech Levels in performance tables in England. It is a requirement of these qualifications for centres to secure for every learner employer involvement through delivery and/or assessment of these qualifications.

The minimum amount of employer involvement must relate to at least one of the mandatory, although we encourage you to find ways to engage with employers for other units as well.

Eligible activities and suggestions/ideas that may help you in securing meaningful employer involvement for this unit are given in the table below.

Please refer to the *Qualification Handbook* for further information including a list of activities that are not considered to meet this requirement.

Meaningful employer involvement	Suggestion/ideas for centres when delivering this unit
1. Learners undertake structured work experience or work placements that develop skills and knowledge relevant to the qualification.	Learners could shadow technical staff at local venues and theatres to gain an insight into the practical skills that are required.
2. Learners undertake project(s), exercises(s) and/or assessments/examination(s) set with input from industry practitioner(s).	An employer could provide a brief, outlining the tasks that a Technical Manager would have to fulfil in order for a performance to go ahead, for learners to complete.
3. Learners take one or more units delivered or co-delivered by an industry practitioner(s). This could take the form of master classes or guest lectures.	A seminar or master class from an industry professional will help learners to understand the way(s) in which professionals work as technical managers. The Musicians' Union may be able to help with contacts.
4. Industry practitioners operating as 'expert witnesses' that contribute to the assessment of a learner's work or practice, operating within a specified assessment framework. This may be a specific project(s), exercise(s) or examination(s), or all assessments for a qualification.	Professionals could act as expert witnesses, observing and commenting on learners as they perform tasks carried out by Technical Managers.

To find out more
ocr.org.uk/performingarts
or call our Customer Contact Centre on **02476 851509**

Alternatively, you can email us on **vocational.qualifications@ocr.org.uk**