

Higher National Unit Specification

General information for centres

Unit title: Sound Production Practice 1

Unit code: DJ36 34

Unit purpose: This Unit is designed to provide candidates with the knowledge and skills necessary to connect and test audio recording equipment and record audio signals that are distortion and artefact free using current audio technology.

On completion of the Unit the candidate should be able to:

1. Demonstrate the correct procedure for connecting audio systems.
2. Demonstrate the correct procedure for testing audio systems.
3. Demonstrate the correct process for recording audio signals from various sources.

Credit points and level: 1 HN Credit at SCQF level 7: (8 SCQF credit points at SCQF level 7*)

**SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

Recommended prior knowledge and skills: Access to this Unit will be at the discretion of the Centre. However it is recommended that candidates should have some prior knowledge of sound production techniques. This may be evidenced by having studied the appropriate NQ Unit(s), relevant prior experience, or through the study of Sound Production Theory 1. Candidates should also have good communication skills. These may be demonstrated by the achievement of core skill Communication at Higher level or by possession of Higher English and Communication or a suitable NQ Communication Unit (SCQF level 5/6).

Core skills: There may be opportunities to gather evidence towards core skills in this Unit, although there is no automatic certification of core skills or core skills components.

Context for delivery: This is a mandatory Unit included in the frameworks for HNC/D Sound Production and is an optional Unit included in the frameworks HNC/D Music group awards. If this Unit is delivered as part of a group award, it is recommended that it should be taught and assessed within the subject area of the group award to which it contributes.

It is recommended that this Unit is delivered after Sound Production Theory 1. However if it is delivered concurrently then Outcome 3 of this Unit should not be assessed before completion of the Sound Production Theory 1 Unit.

General information for centres (cont)

Assessment: Outcomes 1, 2 and 3 should be assessed holistically where candidates are observed participating in a recording session. This will require a well-designed assessor checklist to be used.

Alternatively the candidate could be assessed through a series of practical exercises demonstrating the knowledge and skills required for each outcome separately.

In both cases, the candidate will need to achieve all evidence required.

Candidates must produce a summary of equipment used during recording and produce a log of the tasks undertaken while actively participating in a recording session.

Candidates must also retain a checklist, signed by their tutor, showing evidence of practical competence to demonstrate completion of these outcomes. The audio recording must be retained for evidence.

Where this Unit is delivered as part of an integrated course of work, the evidence requirements can be contained within other coursework documentation, eg Multi-track Recording project. If this Unit, or elements of it, are integrated, clear guidelines must be available for both candidate and assessor as to the successful achievement of the evidence requirements for this Unit.

Higher National Unit specification: statement of standards

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The sections of the Unit stating the Outcomes, knowledge and/or skills, and evidence requirements are mandatory.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the knowledge and/or skills section must be taught and available for assessment. Candidates should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Demonstrate the correct procedure for connecting audio systems

Knowledge and/or skills

- ◆ Cables and connectors required for audio systems
- ◆ Correct procedure for the interconnection of audio recording and reproduction devices
- ◆ Correct observance of current Health and Safety legislation while connecting audio systems

Evidence requirements

Candidates will need to provide evidence to demonstrate their knowledge and/or skills by showing that they can:

- ◆ correctly identify and select the appropriate cables and connectors from a wide range of different types currently being used within audio systems, including balanced and/or unbalanced types where appropriate
- ◆ correctly handle the chosen cables
- ◆ correctly lay and secure the chosen cables and correctly observe current Health and Safety legislation
- ◆ correctly produce a wiring schematic for the connected audio

Evidence should be generated through a practical assessment where the candidates will identify, select and connect an audio system as well as produce a summary of equipment connected and a wiring diagram. The assessment should be carried out under open book controlled conditions with a time limit of one hour.

Information regarding a single holistic assessment can be found under Outcome 3.

An observation checklist must be used to record the required assessment information.

Higher National Unit specification: statement of standards (cont)

Unit title: Sound Production Practice 1

Assessment guidelines

It is recommended that the candidates are observed participating in the connecting of recording systems until all skills have been satisfactorily demonstrated. The assessment of this outcome should be combined with Outcomes 2 and 3 as part of a single holistic assessment. The single assessment will ensure the candidates ability to connect the recording equipment safely and efficiently in any given recording situation. Where possible, assessments should reflect real world situations to place the unit in context.

Should there be ambiguity regarding a candidate's response, oral questioning may be used to eliminate any doubt as to the candidate's understanding. The lecturer should note questions and responses.

Outcome 2

Demonstrate the correct procedure for testing audio systems

Knowledge and/or skills

- ◆ Correct procedure for a visual inspection of audio system prior to power up
- ◆ Correct procedure for powering up audio systems
- ◆ Correct procedure for adjusting and controlling gain structure within an audio system
- ◆ Correct procedure for establishing signal paths in an audio system
- ◆ Correct identification of any fault in the audio system
- ◆ Correct repair and/or remediation of any faults found within the system
- ◆ Correct observance of current Health and Safety legislation while testing audio systems

Evidence requirements

Candidates will need evidence to demonstrate their knowledge and/or skills by showing that they can:

- ◆ carry out a visual inspection and make any required adjustments prior to the power up stage
- ◆ power up the audio system correctly at the start of a session and power down the system at the end of a session
- ◆ establish the required signal paths
- ◆ carry out fault-finding procedures and identify two introduced faults
- ◆ remedy and/or repair any fault
- ◆ observe and implement safe working practice

Evidence should be generated through a practical assessment where the candidates will inspect and test an audio system as well as produce a summary of equipment used and a log of the tasks undertaken for testing audio systems. The assessment should be carried out under open book controlled conditions with a time limit of one hour.

Higher National Unit specification: statement of standards (cont)

Unit title: Sound Production Practice 1

Information regarding a single holistic assessment can be found under Outcome 3.

Each candidate must correctly identify and remedy two faults introduced to the system by the assessor or which occur naturally.

An observation checklist must be used to record the required assessment information.

Assessment guidelines

It is recommended that the candidates are observed participating in the testing of recording systems. They must correctly remedy two introduced faults in addition to any which occur as part of the process.

The assessment of this outcome should be combined with Outcomes 1 and 3 as part of a single assessment for the candidate. The single assessment will ensure the candidates ability to connect, test and operate the recording equipment safely and efficiently in any given recording situation.

Where possible, assessments should reflect real world situations to place the unit in context.

Should there be ambiguity regarding a candidate's response, oral questioning may be used to eliminate any doubt as to the candidate's understanding. The lecturer should note questions and responses.

Outcome 3

Demonstrate the correct process for recording audio signals from various sources

Knowledge and/or skills

- ◆ Correct procedure to configure recording devices
- ◆ Correct procedure for recording sound sources
- ◆ Record various sound sources ensuring the resultant recording is undistorted and acceptable in terms of level and clarity
- ◆ Correct observance of current Health and Safety legislation while producing recordings

Evidence requirements

Candidates will need evidence to demonstrate their knowledge and/or skills by showing that they can, after successfully configuring recording equipment, produce an audio recording from at least four different types of sound source. The recordings must be undistorted and acceptable in terms of level and clarity.

The candidate must also provide a summary of equipment used during recording and produce a log of the tasks undertaken while actively participating in a recording session. In addition, track sheets, desk and outboard mark-up sheets should be kept for evidence.

Higher National Unit specification: statement of standards (cont)

Unit title: Sound Production Practice 1

The assessment should be carried out under open book controlled conditions with a time limit of one hour.

For a single holistic assessment candidates will undertake a practical assessment which involves a recording session. Firstly the candidate will identify, select and connect an audio system as well as produce a summary of equipment connected and a wiring diagram. They will then inspect and test the audio system as well as produce a summary of equipment used and a log of the tasks undertaken for testing the audio systems. Finally they will participate in a recording session where they will successfully configuring recording equipment, produce an audio recording from at least four different types of sound source. The recordings must be undistorted and acceptable in terms of level and clarity. They must also provide a summary of equipment used during recording and produce a log of the tasks undertaken while actively participating in the recording session.

The single assessment event should be carried out under open book controlled conditions with a time limit of three hours.

Assessment guidelines

This assessment, when combined with Outcomes 1 and 2 allows the candidate to be assessed in carrying out the primary function of a recording engineer; ie the ability to set up equipment and record sound sources effectively.

It is recommended that each candidate is observed making audio recordings of at least four different sound sources, for example, the human voice, acoustic guitar, drum kit, electric guitar. The correct handling of electronic sound sources whether as direct injection, sample or synthesised line level sources is encouraged. However, if used, they should only count as a maximum of two of the evidenced types of recorded sound.

The assessment of this outcome should be combined with outcomes 1 and 2 as part of a single assessment for the candidate. The single assessment will ensure the candidates' ability to connect the recording equipment safely and efficiently in any given recording situation. Where possible, assessments should reflect real world situations to place the unit in context.

Should there be ambiguity regarding a candidate's response, oral questioning may be used to eliminate any doubt as to the candidate's understanding. The lecturer should note questions and responses.

Administrative Information

Unit code:	DJ36 34
Unit title:	Sound Production Practice 1
Superclass category:	XL
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Higher National Unit specification: support notes

Unit title: Sound Production Practice 1

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

Guidance on the content and context for this Unit

This Unit is designed to equip the candidates with the basic skills and knowledge required for connecting, checking, faultfinding and operating audio recording equipment safely and efficiently. The emphasis throughout should be on setting up and operating audio recording equipment within a realistic industry context to produce the best possible quality of recording.

Candidates should be able to complete this Unit using basic audio recording packages. There is no requirement to record material using professional quality equipment, although this would be beneficial. Candidates should be able to complete the Unit using a range of audio recording equipment whether analogue or digital, however no particular recording packages are specified. Successful completion of this Unit would normally allow the candidate to articulate to HN Unit Sound Production Practice 2.

Guidance on the delivery and assessment of this Unit

This Unit is designed to be practical in nature and aims to provide candidates with technical and audio skills relating to sound production. As such, the keeping of accurate logbooks, checklists and audio recordings will be an important part of assessment evidence.

Candidates' logbooks will be signed by the assessor to provide evidence of achievement, and supported by physical evidence in the form of a recording. Candidates' assessment checklists along with oral questioning may be used to confirm the candidates' ability to connect, test and operate recording equipment safely and efficiently. A single assessment in the form of a project or recording session may be used to provide evidence for all the outcomes.

While this Unit may be delivered as a 'stand alone' Unit, it is envisaged that it will form an integral part of the HNC Sound Production award. This will require the candidates to undertake the HN units Sound Production Theory 1 and Digital Audio Workstations. These units will provide candidates with some of the theory required when attempting the practical tasks required for this unit whilst extending their practical experience.

If this Unit is delivered out-with the Sound Production Framework, Centres should feel free to adapt delivery of the Unit to fit the specific requirements of their course structures as long as all the evidence requirements are met. In addition, Centres are not required to use specific equipment, whether analogue or digital, however this Unit is designed to reflect current professional studio-recording standards.

Higher National Unit specification: support notes (cont)

Unit title: Sound Production Practice 1

Open learning

Due to the highly specialised and practical nature of this Unit it is unlikely that it can be delivered and/or assessed by open/distance learning. However, if it was attempted it would require planning by the centre to ensure the sufficiency and authenticity of candidate evidence. Arrangements would have to be made to ensure that the assessment(s) are delivered in an appropriate manner.

For further information and advice please refer to *Assessment and Quality Assurance for Open and Distance Learning (SQA, February 2001 – publication code A1030)*.

Candidates with additional support needs

This Unit specification is intended to ensure that there are no artificial barriers to learning or assessment. The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering alternative Outcomes for Units. For information on these, please refer to the SQA document *Guidance on Special Assessment Arrangements for Candidates with Additional Support Needs* (BA 2399, SQA, due 2004).

General information for candidates

Unit title: Sound Production Practice 1

On completion of this Unit you should be able to:

- 1 Demonstrate the correct procedure for connecting audio systems
- 2 Demonstrate the correct procedure for testing audio systems
- 3 Demonstrate the correct process for recording audio signals from various sources

This Unit is designed to provide you with the knowledge and skills required for connecting, testing, and operating audio recording equipment to make sound recordings from various sound sources.

You will learn about:

- ◆ the various types of connectors and their uses within audio recording equipment systems
- ◆ the various types of balanced and unbalanced cables utilised within audio recording equipment systems
- ◆ the correct reasons for choosing combinations of the above
- ◆ the correct method of systematic testing and fault finding of audio recording systems
- ◆ the correct method of recording various sound sources

You will be assessed on:

- connecting a selection of audio recording equipment using the appropriate cables and connectors
- testing these audio recording systems
- recording various audio sources using these audio recording systems

It is envisaged that this Unit will be delivered as part of an audio recording session and you should be able to participate in the selection and connection of audio recording systems, the systematic testing and fault finding of these systems, and using the systems to make audio recordings.

It is recommended that, in addition to class documentation, you study *Modern Recording Techniques* by Huber and Runstein as it contains much of the basic information. This is not the only book however, and it is also recommended that you seek books in the Focal Press Music Technology category such as *Sound Engineering explained* by Michael Talbot-Smith.

Successful completion of this outcome will normally allow you to take the HN Unit Sound Production Practice 2.