Higher National Unit Specification

General information for centres

Unit title: Digital Audio for Artists and Designers

Unit code: DX32 35

Unit purpose: This Unit is designed to provide candidates with the knowledge and skills necessary to edit digital audio and incorporate a digital audio file/s within an Art or Design context.

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

1   Research and analyse sources for audio.
2   Capture and edit digital audio.
3   Produce digital audio material for an art or design project/s.

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

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 is at the discretion of the centre. Candidates should have a basic understanding of working within a computer environment. An understanding of the basic principles of digital audio may be beneficial but not mandatory.

Core Skills: There are opportunities to develop the Core Skills of Problem Solving and Information Technology at SCQF level 6 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Context for delivery: 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.

Assessment: Outcome 1 can be assessed by either oral or written evidence. The assessment for outcomes 2 and 3 can be integrated into a single project requiring candidates to create an audio file/s to be incorporated within a wider context to a given brief/s. The final audio file/s should be incorporated within any suitable context for example an audio visual presentation, web site, advertising media, CD-Rom, DVD, multimedia production, digital video, performance, installation etc.

Higher National Unit specification: statement of standards

Unit title: Digital Audio for Artists and Designers

Unit code: DX32 35

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

Research and analyse sources for audio

Knowledge and/or skills

- Sources for audio
- Copyright
- Effectiveness of audio

Evidence Requirements

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

- identify a range of sources for audio. This should include stored audio and recording or commissioning original sound
- understand the implications of current copyright law and the procedures for obtaining copyright from the owner
- analyse the effective use of audio within a variety of contexts
- select appropriate audio for the given art or design project/s

This Outcome should be assessed by written or oral evidence (minimum 300 words or equivalent).

Assessment guidelines

Candidates should identify a range of sources for audio, the effective use of audio in a variety of contexts and demonstrate awareness of the implications of current copyright legislation. While candidates are not required to obtain copyright in respect of media used within an educational context they must be able to identify situations within a professional context in which copyright must be obtained. This could include audio stored in any aspect of the digital domain, the extraction of audio from an analogue source and recording or commissioning original sound. The candidate's selection of audio in Outcome 1 should be appropriate to the given art or design brief/s for Outcomes 2 and 3.

Higher National Unit specification: statement of standards (cont)

Unit title: Digital Audio for Artists and Designers

Outcome 2

Capture and edit digital audio

Knowledge and/or skills

- ♦ Capturing audio
- ♦ File formats
- ♦ Editing digital audio

Evidence Requirements

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

- ♦ identify and set up the necessary system for capturing audio
- ♦ understand appropriate audio file formats
- ♦ successfully and accurately capture audio by operating software and equipment competently
- ♦ trim audio and set start points and stop points accurately
- ♦ create a looping audio file
- ♦ create a one shot audio file

This Outcome should be assessed through practical tasks and evidenced by the tutor using an assessment checklist.

Assessment guidelines

This Outcome should be assessed through a practical task of successfully and accurately capturing audio by operating software competently. Appropriate file types for capturing and saving audio should be used correctly. Candidates should demonstrate competence in editing digital audio including trimming, fading, and creating a looping audio file and a one shot audio file which are sympathetic to the given brief/s. Although it is not mandatory candidates could choose to record original sound or work from original commissioned sound.

Outcome 3

Produce digital audio material for an art or design project/s

Knowledge and/or skills

- ♦ Compressing digital audio
- ♦ File formats
- ♦ Synchronising digital audio
- ♦ Working to a given brief/s

Higher National Unit specification: statement of standards (cont)

Unit title: Digital Audio for Artists and Designers

Evidence Requirements

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

♦ apply compression settings to a digital audio file and save the file to a suitable medium meeting the requirements of an art or design project/s
♦ import and embed the audio file within an art or design project/s
♦ synchronise audio with other media. This should include the appliance of audio to specific time points within a presentation including the streaming of audio with any visual elements

This Outcome should be assessed on candidates' ability to select settings and save the final edited audio file/s in a format which is appropriate for the art or design project.

Assessment guidelines

This Outcome should be assessed on candidates' ability to select settings and save the final edited audio file/s in a format which is appropriate for the art or design project/s. Candidates should make appropriate settings for sampling rate and bit depth. The prepared audio file should be sympathetically incorporated within a presentation for example a digital video, a web site, a CD-Rom, a DVD production, a multimedia publication, an installation, an audio visual piece or as part of a performance. The term 'presentation' should be interpreted in as wide a context as possible.

Administrative Information

Unit code: DX32 35

Unit title: Digital Audio for Artists and Designers

Superclass category: KG

Original date of publication: August 2006

Version: 01

History of Changes:

Version	Description of change	Date

Source: SQA

SQA acknowledges the valuable contribution that Scotland's colleges have made to the development of Higher National qualifications.

Additional copies of this Unit specification can be purchased from the Scottish Qualifications Authority. Please contact the Customer Contact Centre for further details, telephone 0845 279 1000.

Higher National Unit specification: support notes

Unit title: Digital Audio for Artists and Designers

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 provide candidates with the knowledge and skills necessary to capture and edit digital audio and incorporate a digital audio file/s within an art or design project. Candidates should, on completion of the Unit, be able to competently capture audio, edit digital audio using computer software and save the prepared audio to an appropriate storage medium. Candidates should understand a variety of sources for audio as well as current and emerging copyright and intellectual property legislation and how it is obtain.

Guidance on the delivery and assessment of this Unit

This practical Unit will integrate with other art, design and multimedia Units, and may be delivered concurrently with the Unit Digital Video for Artists and Designers as part of wider audio/visual project/s.

The Unit should be delivered in such a way that candidates have the choice of researching and utilising relevant sources for audio and recording or commissioning original sound. It is advisable that all candidates are given the opportunity to understand the uses of digital audio across a variety of applications. This can be demonstrated by lectures, research and the practical use of exemplars.

Outcome 1 is assessed by the research and investigation of a variety of sources for audio. This could include audio stored in any aspect of the digital domain, the extraction of audio from an analogue source and recording or commissioning original sound. Candidates should demonstrate their understanding of current and emerging copyright legislation and intellectual property and the procedure for obtaining copyright. Candidates should be able to describe how to obtain copyright from the owner where it is necessary. Candidates' analysis and discussion of the effective application of audio should be clearly stated in either written or oral evidence. Candidates should evaluate the effectiveness of audio in a variety of contexts. The candidate's selection of audio with which to work should be appropriate for the given art or design project/s.

Outcome 2 is assessed by a practical exercise making direct reference to research and investigation carried out in Outcome 1. Candidates should demonstrate competence in the use of a computer system to successfully and accurately capture and edit digital audio. Candidates are required to produce a looping audio file and a one shot audio file.

Outcome 3 is assessed by saving the finished audio file/s in an appropriate format for sympathetic incorporation within an art or design project/s. Candidates should demonstrate competence in compressing audio to a suitable file size for the context in which it is to be delivered and by synchronising audio to other media.

It is envisaged that this Unit is used to support an integrated project and candidates may use work created in other related Units.

Higher National Unit specification: support notes (cont)

Unit title: Digital Audio for Artists and Designers

Opportunities for developing Core Skills

All elements of the Core Skill of Problem Solving, Planning and Organising, Critical Thinking, and Reviewing and Evaluating, will be fully developed and enhanced in the Unit. Candidates undertake a complex practical task, where identifying and assessing the relevance of all factors and identifying and maximising all available resources in order to pre-empt potential difficulties will involve a high level of critical thinking. Designing effective strategies which allow on-going opportunities for review and modification will reflect and apply problem solving skills. Although a checklist approach to Problem Solving is not particularly useful for the level of skill needed candidates will benefit from support materials and/or personal interviews with the assessor to reinforce analytical evaluative approaches to overall achievement in order to inform any future activities and further development. Candidates need to produce and present materials to a standard which would be acceptable in industry and acquire software skills to effectively undertake creative projects and to work with digital imaging software applications. Working to project briefs they must understand the appropriate use of digital audio files. Some formative opportunities to create materials and designs using models with appropriate use of a range of presentation styles may be a useful way to maximise skills and the effectiveness and impact of materials created.

Open learning

Delivery of this unit through open learning is greatly restricted by the specialist nature of the equipment required to undertake the outcomes. For further information and advice please refer to the SQA document *Assessment and Quality Assurance for Open and Distance Learning* which is available on SQA's website: **www.sqa.org.uk**.

Candidates with disabilities and/or additional support needs

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 Alternative Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs,* which is available on SQA's website: **www.sqa.org.uk**.

General information for candidates

Unit title: Digital Audio for Artists and Designers

This Unit will provide you with the knowledge and skills necessary to capture, edit and apply digital audio skills.

There are three main areas covered in the Unit. Each area is assessed as a separate Outcome.

Outcome 1 This Outcome covers three main topics. You will investigate sources for audio. You will also consider recording and commissioning original sound. You will look at copyright issues and you will analyse how sound is used effectively in a variety of situations and use this knowledge to help you select suitable audio.

Outcome 2 You will capture and edit digital audio using appropriate computer software. You will edit audio with a view to sympathetically incorporating it in a presentation and you will produce both a looping audio file and a one shot audio file.

Outcome 3 You will save the finished audio file/s in a format appropriate for incorporation in an art or design project/s.