

## Higher National Unit Specification

### General information for centres

**Unit title:** Music Sequencing and Programming

**Unit code:** DJ2Y 34

**Unit purpose:** This unit should give the candidate an understanding of computer systems for the purpose of creating music. This Unit would be suitable for musicians with an interest in the more technical aspects of music production and technicians who wish to gain a greater understanding of musical conventions.

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

1. Demonstrate an understanding of the set up of a music computer.
2. Operate a music computer.
3. Use a music sequencer/workstation to create a piece of music.

**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:** The candidate should have a basic knowledge of sequencing software and its use. 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 an optional Unit in the frameworks for HNC/D Music and HNC/HND Sound Production. 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:** There could be two assessments for all three outcomes, one assessment for outcome 1 and a combined assessment for outcomes 2 and 3. For candidates undertaking the group award further integration may be possible with units such as Digital Audio Workstations 1, Practical Musicianship, First or Second Study Composition and Songwriting 1.

## **Higher National Unit specification: statement of standards**

**Unit title:** Music Sequencing and Programming

**Unit code:** DJ2Y 34

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 an understanding of the set up of a music computer.

#### **Knowledge and/or skills**

- ◆ Data storage media and data transfer protocol
- ◆ RAM
- ◆ Audio interfaces
- ◆ Peripherals
- ◆ Operating Systems
- ◆ Sequencers
- ◆ Sampling

#### **Evidence requirements**

Candidates will need written or oral evidence featuring an example of each of the following to demonstrate their knowledge and/or skills by showing that they can:

- ◆ describe the size of data storage media
- ◆ describe the difference in data transfer rates of data storage media and data transfer protocols
- ◆ describe the difference between MIDI and audio signals
- ◆ explain system peripherals including I/O devices, plug-ins and external storage media
- ◆ describe the concept of current operating systems for music
- ◆ describe the function of sequencers
- ◆ describe the basics of sampling

The evidence should feature an example of each.

The Assessment for this outcome should take the form of written short answer questions or, a written report or oral presentations. Oral presentations should be video taped and kept as evidence. Assessments should be carried out under open book, controlled conditions.

## **Higher National Unit specification: statement of standards (cont)**

**Unit title:** Music Sequencing and Programming

### **Assessment guidelines**

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**

Operate a music computer.

### **Knowledge and/or skills**

- ◆ Selection of correct drivers from within the sequencer.
- ◆ Import audio from a source medium.
- ◆ Capture audio from a pre-recorded CD
- ◆ Record analogue audio with appropriate bit and sample rates
- ◆ File storage and handling
- ◆ Connection and operation of a MIDI input source

### **Evidence requirements**

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

- ◆ select correct drivers from within the sequencer.
- ◆ import audio from a source medium.
- ◆ capture audio from a pre-recorded CD
- ◆ record analogue audio with appropriate bit and sample rates
- ◆ handle and store files
- ◆ connect and operate a MIDI input source

A pass will be awarded if all of the skills are achieved.

Evidence may be generated by set exercises or may be collated with a tutor operational checklist during activities leading up to Outcome 3. Evidence may also take the form of media containing a project folder with all files and subfolders neatly labelled and a mix of the project material

### **Assessment guidelines**

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.

## **Higher National Unit specification: statement of standards (cont)**

**Unit title:** Music Sequencing and Programming

### **Outcome 3**

Use a music sequencer/workstation to create a piece of music

#### **Knowledge and/or skills**

- ◆ Musical structures
- ◆ Awareness of harmony
- ◆ Basic MIDI and audio integration in a structured framework.
- ◆ Use of appropriate effects.
- ◆ Use appropriate equalisation (EQ)
- ◆ Mix down to a music file appropriate for chosen media

#### **Evidence requirements**

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

- ◆ Write a piece with a clear musical structure
- ◆ Demonstrate an awareness of harmony
- ◆ Demonstrate basic MIDI and audio integration in a structured framework.
- ◆ Use appropriate effects.
- ◆ Use appropriate EQ.
- ◆ Mix down to a music file appropriate for chosen media

The completed piece should be appropriately structured and contain at least two parts which are harmonically correct. The structure should evolve through at least two distinct sections. Harmonic pieces, irrespective of the genre or method of creation, should use a minimum of three note chords.

Pieces should then be mixed and have dynamic and time domain effects and EQ added. All files relating to sequencing software should be contained within appropriate named folders.

Candidates must submit removable media which contain the song file and all related audio, fade and graphic files. All audio files should be correctly labelled and stored in an audio folder. The media should also contain a mix of the finished piece.

#### **Assessment guidelines**

Assessment need only demonstrate a basic awareness of structure and harmony. For example, if the composed piece is a song, a simple harmonic form such as I, IV, V, with appropriate melodic accompaniment, would qualify for a pass. A piece constructed entirely from samples should show similar structural complexity and harmonic awareness.

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:** DJ2Y 34

**Unit title:** Music Sequencing and Programming

**Superclass category:** LF

**Date of publication:** September 2004

**Version:** 02

### History of changes:

Version	Description of change	Date
02	Removal of Word Count and Presentation Length.	27/05/11

**Source:** SQA

© Scottish Qualifications Authority 2004, 2011

This publication may be reproduced in whole or in part for educational purposes provided that no profit is derived from reproduction and that, if reproduced in part, the source is acknowledged.

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:** Music Sequencing and Programming

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 optional to the delivery of the group awards HNC/D Music and HNC/D Sound Production. Where the candidates have an enhanced musical knowledge, the unit may be biased towards the technical aspects of sequencing and music computing. Where the candidates' background is technical, simple harmony and compositional forms may receive more attention. This applies especially to Outcome 3 where musically advanced candidates should be encouraged to experiment with compositional techniques on the computer whilst the sound production candidate, who may be more technically skilled, should be assisted in the understanding of basic composition. Similarly, music based candidates should be made aware of basic computer systems and file storage protocols.

Candidates do not need to create original compositions but the final created piece must show required harmonic content and appropriate structural development. Candidates could be presented with pre-prepared backing tracks in the form of audio and/or MIDI drum parts and bass lines and should compose suitable melody and harmony parts to fit.

### **Guidance on the delivery and assessment of this Unit**

While all the outcomes could be assessed individually, it is expected that integration shall occur between outcomes 2 and 3. Candidates undertaking the group award (*does this refer to both HNC/D Music and HNC/D Sound Production?*) may also integrate outcomes with outcomes from 'Digital Audio Workstations 1', 'First Study 1: Composition' and 'Songwriting 1'

### **Open learning**

This unit could be delivered by open learning with suitable support material. The candidate would have to appear in person for assessment of outcome 1. At this time they could present evidence for assessment of Outcomes 2 and 3. Candidates could also submit the appropriate files for Outcomes 2 and 3 on disk via post or as attachments via Email. Delivering centres will be responsible for ensuring authenticity of candidates' work.

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

## **Higher National Unit specification: support notes (cont)**

**Unit title:** Music Sequencing and Programming

### **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:** Music Sequencing and Programming

This unit is designed to give you a basic understanding of computing protocols and an introduction to basic music creation concepts.

This optional unit may form part of either the HNC/D Music or HNC/D Sound Production course. If following the music programme, the unit may show an instructional bias towards the technical aspects of sequencing and music computing. If following the sound production programme, simple harmony and compositional forms may receive more attention.

You will be involved in practical exercises using technology during the course of this unit. You will learn how to operate this technical equipment, but much of the time will be given over to experimenting with musical ideas. While this unit does not intend to deliver detailed instruction in musical harmony and structure it is important that the finished pieces sound musically correct. To this end tutors will explain basic musical concepts to ensure pieces created are musically consistent.

Assessment may take the form of a combination of a written report, practical exercises or a single detailed submission which covers all aspect of this unit.