



National Unit specification: general information

Unit title: Stringed Instruments: Manufacture Instrument Body Components (SCQF level 5)

Unit code: FX3A 11

Superclass: LJ

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Version: 01

Summary

The purpose of this Unit is to enable the candidate to produce the parts required to make an instrument body. The Unit provides the candidate with an introduction to the methods of musical instrument manufacture and construction. The constituent components of stringed musical instrument bodies are described and the manufacturing process for individual parts is explained.

This is a mandatory Unit within the National Certificate in Stringed Musical Instrument Making and Repair (SCQF level 5) but can also be taken as a freestanding Unit.

This Unit is suitable for candidates with no previous experience of instrument making and will facilitate progression to further study in this area.

Outcomes

- 1 Fabricate an instrument front
- 2 Fabricate an instrument back
- 3 Manufacture braces
- 4 Manufacture blocks and linings
- 5 Fabricate instrument ribs

Recommended entry

While entry is at the discretion of the centre, candidates would normally be expected to have basic woodworking skills. This may be evidenced by attainment of the following qualification or equivalent skills level:

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- ◆ *Stringed Instruments: Woodworking Machinery* (SCQF level 5)

Credit points and level

3 National Unit credits at SCQF level 5: (18 SCQF credit points at SCQF level 5*)

*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.

Core Skills

Achievement of this Unit gives automatic certification of the following Core Skills component:

- ◆ Critical Thinking at SCQF level 5

There are also opportunities to develop aspects of Core Skills which are highlighted in the Support Notes of this Unit specification.

National Unit specification: statement of standards

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Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

Outcome 1

Fabricate an instrument front.

Performance Criteria

- (a) A front is accurately assessed and marked out with regard to criteria for joining.
- (b) A front is correctly prepared and joined.
- (c) The front is graduated accurately and inlays inserted where necessary.
- (d) The front is cut accurately to the final thickness and shape for fitting to the ribs.
- (e) Processes are performed using appropriate tools.
- (f) The correct processes are accurately described.
- (g) Health and safety requirements are adhered to.

Outcome 2

Fabricate an instrument back.

Performance Criteria

- (a) A back is accurately assessed and marked out with regard to criteria for joining.
- (b) A back is correctly prepared and joined.
- (c) The back is cut precisely to a suitable thickness and shape.
- (d) Processes are performed using appropriate tools.
- (e) The correct processes are accurately described.
- (f) Health and safety requirements are adhered to.

Outcome 3

Manufacture braces.

Performance Criteria

- (a) Braces are cut and shaped to the correct size prior to glueing.
- (b) Braces are accurately curved where necessary.
- (c) Processes are performed using appropriate tools.
- (d) The correct processes are accurately described.
- (e) Health and safety requirements are adhered to.

National Unit specification: statement of standards (cont)

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Outcome 4

Manufacture blocks and linings

Performance Criteria

- (a) Blocks are manufactured to the correct size and shape.
- (b) Linings are manufactured to the correct size and shape.
- (c) Processes are performed using appropriate tools.
- (d) The correct processes are accurately described.
- (e) Health and safety requirements are adhered to.

Outcome 5

Fabricate instrument ribs.

Performance Criteria

- (a) Ribs are accurately assessed with regard to criteria for planning, bending and joining.
- (b) Ribs are accurately thinned.
- (c) Ribs are accurately marked out prior to bending.
- (d) Ribs are bent accurately to shape.
- (e) Processes are performed using appropriate tools.
- (f) The correct processes are accurately described.
- (g) Health and safety requirements are adhered to.

Evidence Requirements for this Unit

Evidence is required to demonstrate that candidates have achieved all Outcomes and Performance Criteria.

A combination of product and performance evidence is required. Additional written and /or oral recorded evidence is also required to demonstrate the candidate's understanding of the processes.

Product evidence:

The following body components must be completed ready for assembly. Each of these should conform to the specifications prescribed by the plan or tutor.

- ◆ Front
- ◆ Back
- ◆ Braces
- ◆ Blocks
- ◆ Linings
- ◆ Ribs

National Unit specification: statement of standards (cont)

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Performance evidence which demonstrates that:

- ◆ the candidate uses the appropriate tools and machinery in the correct manner to suit each task
- ◆ the candidate adheres to the health and safety regulations and guidelines with regard to the workshop environment and use of hand-tools and machinery

Product and Performance Evidence may be recorded on a checklist.

Written and/or oral recorded evidence is required which provides an accurate description of the manufacturing process being used by the candidate and demonstrates that the procedures being used have been understood.

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 120 hours.

Guidance on the content and context for this Unit

This is a mandatory Unit within the National Certificate in Stringed Musical Instrument Making and Repair (SCQF level 5), but can also be taken as a freestanding Unit.

This Unit is most effective when combined with the Unit *Stringed Instruments: Manufacture of an Instrument Neck* (SCQF Level 5), as this will enable the candidate to manufacture all of the components required to construct an instrument.

This Unit enables the candidate to demonstrate an understanding of the theoretical and practical aspects of musical instrument manufacture. It is necessary that candidates clearly recognise the relationship between the neck and body to ensure that the body components are manufactured correctly to suit the pre-determined scale length, string height and neck joint.

The range of tools used to construct the components might include the following; plane, saw, coping saw, chisel, gauge, marking gauge, spoke shave, rasp, file, cabinet scraper and dividers. A woodworking bench with vice are also required. Candidates should have some basic woodworking skills prior to beginning the Unit. The ability to plane a surface flat is necessary and should be further developed during the Unit. Workshop health and safety must be adhered to.

Candidates completing this Unit will be working towards aspects of the following Creative and Cultural Skills National Occupational Standards.

Craft: CR13 Select and use techniques, materials, tools and equipment for craft

Craft: CR14 Prepare and maintain materials, tools and equipment for craft

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Craft: CR15 Use safe working practices and spaces for craft

Craft: CR16 Complete the craft making process

Craft: CR17 Document and record craft work and work practice

Craft: CR51 Maintain and repair craft work

Craft: CR52 Restore, conserve and reconstruct work in craft

Craft: CR56 Make sure your own actions reduce risks to health and safety

Guidance on learning and teaching approaches for this Unit

This is a workshop based Unit, however tutor input outlining construction techniques together with demonstrations relating to component manufacture can be given prior to embarking on the practical work.

The relationship between the body, strings, neck and bridge should be clearly understood in order to build a body that corresponds correctly to the neck, scale length and bridge position.

Methods of interpreting written and diagrammatic information should be explained and demonstrated.

It will be useful to identify software that can be used to calculate scale lengths and string tensions.

National Unit specification: support notes (cont)

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Guidance on approaches to assessment for this Unit

Evidence of practical work may be recorded on an observation checklist supported by product evidence as detailed in the Performance Criteria and Evidence Requirements. Written and/or oral evidence detailing the manufacturing process will be used to ensure candidates' understanding — this could be in the form of a logbook.

The logbook and checklist evidence could be accumulated holistically throughout the Unit for all Outcomes.

When taught as part of the National Certificate in Stringed Musical Instrument Making (SCQF level 5) there are opportunities for integration of delivery and assessment with the following Units;

- ◆ *Stringed Instruments: Manufacture of an Instrument Neck* (SCQF Level 5)
- ◆ *Stringed Instruments: Assembly of Instrument Body and Neck* (SCQF level 5)
- ◆ *Stringed Instruments: Instrument Inlay and Soundhole Cutting Techniques* (SCQF Level 5)
- ◆ *Stringed Instruments: Manufacture of Jigs and Templates* (SCQF level 5)

Opportunities for the use of e-assessment

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or e-checklists. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)*, *SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.

Opportunities for developing Core Skills

In this Unit candidates will manufacture stringed musical instrument body components.

Candidates will:

- ◆ use appropriate software to make calculations
- ◆ read and interpret diagrams
- ◆ read instruction material relating to the construction process
- ◆ measure, mark and lay out
- ◆ select and use tools
- ◆ identify health and safety issues
- ◆ record the manufacturing process

National Unit specification: support notes (cont)

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This means that as candidates are doing this Unit they will be developing aspects of the Core Skills of *Communication*, *Numeracy* and *Problem Solving*.

In addition, they may develop aspects of the Core Skill of *ICT* where software is used to calculate scale lengths and string tensions.

Disabled candidates and/or those with additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website www.sqa.org.uk/assessmentarrangements

History of changes to Unit

| Version | Description of change | Date |
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