



National Unit specification: general information

Unit title: Jewellery: Working with Wire (SCQF level 5)

Unit code: H1KL 11

Superclass: JH

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Summary

This is an optional Unit in the National Certificate in Jewellery at SCQF level 6. It is also available as a free standing Unit.

The Unit is designed to enable candidates to develop the skills and techniques which will allow them to identify and use the different types of equipment appropriate to shape and join wire components within the context of the manufacture of jewellery and/or silverwares.

This Unit is suitable for candidates who have are undertaking this subject for the first time. It is also suitable for those working in industry who have no formal qualifications. The content of this Unit can be integrated with other jewellery Units.

Outcomes

- 1 Change the form and size of wires according to a brief.
- 2 Make wire components to a brief.
- 3 Solder wire and wire components.

Recommended entry

Entry is at the discretion of the centre. Candidates doing this Unit do not need any prior knowledge or experience of metalwork or the manufacture of jewellery or silverwares. However, good hand-skills will be an advantage.

National Unit specification: general information (cont)

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Credit points and level

1 credit at SCQF level 5 (6 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

Opportunities to develop aspects of Core Skills are highlighted in the support notes of this Unit specification.

There is no automatic certification of Core Skills or Core Skill components in this Unit.

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

Change the form and size of wires according to a brief.

Performance Criteria

- (a) Wire is changed in linear and cross-sectional dimensions according to given brief.
- (b) Wire is changed in cross-sectional form according to given brief.
- (c) Wire is prepared accurately to a brief.

Outcome 2

Make wire components to a brief.

Performance Criteria

- (a) Jump rings are formed using the correct equipment according to given brief.
- (b) Ear-wires are formed to a brief according to given brief.
- (c) Chains are constructed to a brief according to given brief.

Outcome 3

Solder wire and wire components.

Performance Criteria

- (a) Jump rings are soldered shut accurately and cleanly.
- (b) Jump rings are soldered to other components accurately and cleanly.
- (c) Soldered chain is constructed accurately with minimum solder use.
- (d) Wires are soldered to surfaces accurately with minimum solder use.

National Unit specification: statement of standards (cont)

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Evidence Requirements for this Unit

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

The candidate must produce:

- ◆ five different samples of wire, evidencing before-and-after changes of size and cross-sectional form, utilising both the rolling mill and drawplates
- ◆ a series of 30 jump rings in different sizes — which can be cross-assessed with other Outcomes — using both mandrels and pliers
- ◆ a piece of chain with soldered links
- ◆ a pair of simple ear wires
- ◆ a pair of earrings with soldered-on wire posts
- ◆ a pendant with soldered-on jump ring

These samples must conform accurately to the given instruction brief which should include acceptable tolerances and timescales.

The candidate should finish these samples to a standard where they are suitable for further use as components of finished items of jewellery or silverware.

The evidence can be produced over a period of time and may be generated as appropriate to the progress of the candidate.

The evidence must be produced from briefs appropriate to the Outcome being assessed and several briefs are required to fulfil the Outcomes of this Unit. This evidence may be gathered over the course of the delivery of this Unit at times appropriate to the progress of the candidate.

Centres must be satisfied that the evidence submitted is the work of individual candidates.

National Unit specification: support notes

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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 is an optional Unit in the National Certificate in Jewellery at SCQF level 6. It is also available as a free standing Unit. It is envisaged that this Unit be taught as part of a broader jewellery course. Candidates require no previous workshop or metalworking abilities in order to access the Unit. Health and safety issues should be covered as part of the overview of the Unit

This Unit is a basic introduction to the fundamentals of jewellery manufacture and it could usefully be taught in conjunction with *Jewellery: Soldering* (SCQF level 5), which focuses on the processes of soldering, required by Outcome 3.

This Unit aligns to the following National Occupational Standards for Jewellery from Creative and Cultural Skills:

- J3.6 Form jewellery components
- J3.9 Join jewellery components by soldering
- J3.10 Form silverware components
- J3.12 Join silverware components by soldering
- J3.13 Use mechanical methods of joining jewellery or silverware

Guidance on learning and teaching approaches for this Unit

It is envisaged that the teaching of this Unit should be primarily practical with an emphasis on the candidates learning by practising the techniques required.

Demonstrations by tutors and one-to-one instruction and guidance would be an important part of the delivery and candidates could be encouraged to explore the techniques as part of their own personal development as designer-makers. Candidates should be encouraged to be using fine wires of around 0.6–0.8mm by the end of the Unit, but satisfactory performance can be achieved with thicker wires.

It is envisaged that the Unit would be taught in a jewellery studio or workshop and that each candidate would have a bench equipped with a bench peg, adequate lighting and access to marking out equipment in addition to the absolute requirement of the Outcomes for a rolling-mill, drawplates and draw tongs, and soldering equipment.

Candidates should be encouraged to understand the importance of using the correct wire size and form for any given brief and the necessity for tidiness in soldering and finishing.

At all times, candidates should be encouraged to use materials economically and with care for environmental issues.

National Unit specification: support notes (cont)

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Guidance on approaches to assessment for this Unit

The Unit could usefully be taught within the context of commercial jewellery manufacturing, with absolute tolerances and applied timescales to each of the projects. Assessed projects could reflect commercial constraints and should be graded according to the stage in the Unit at which they are assessed.

Candidates could be given specific projects to ensure uniformity or could be given self-directed project, the end products of which reflect the requirements of the Outcomes.

Suggested tolerances would be of around 0.1mm deviation from any pattern and timescales should be set realistically according to the projects given.

The Unit should be assessed after a period of tuition and the candidate should be allowed to practice the techniques before assessment.

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 social software. 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

This Unit will teach the candidate how to shape and form wire components using a variety of workshop techniques and tools. They will also learn how to join wire components using different techniques including soldering.

Candidates will:

- ◆ Follow instructions for manufacturing wire components.
- ◆ Prepare components for soldering.
- ◆ Work in groups to practice activities.
- ◆ Make amendments to equipment and tools to achieve the desired results.
- ◆ Explain their selection of tools and equipment.

As candidates are doing this Unit they will be developing aspects of the Core Skills in *Problem Solving, Working with Others, Numeracy and Communication*.

National Unit specification: support notes (cont)

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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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