



National Unit specification: general information

Unit title: Jewellery: Manufacturing Techniques: An Introduction
(SCQF level 5)

Unit code: H09P 11

Superclass: JH

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Summary

This is an introductory Unit to provide candidates with practical experience of a variety of jewellery making techniques, materials and tools.

Candidates will apply the knowledge and skills gained to produce a series of assemblies using various techniques. The finished work will demonstrate effective selection, and use of materials and techniques as well as the application of correct finishing and safe working practices.

Candidates will need to have access to a fully equipped workshop and be introduced to the health and safety aspects relating to this.

This was developed as an optional Unit within the National Certificate in Jewellery at SCQF level 6. It can also be taken as a freestanding Unit.

Outcomes

- 1 Apply basic metalworking techniques to create samples in accordance with current safety guidelines.
- 2 Apply forming, soldering and surface decoration techniques to metal.
- 3 Produce a series of assemblies using forming and texturing techniques.

Recommended entry

Entry is at the discretion of the centre.

General information (cont)

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Credit points and level

1 National Unit credit at SCQF level 5: (1 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

Apply basic metalworking techniques to create samples in accordance with current safety guidelines.

Performance Criteria

- (a) Identify a selection of appropriate tools and equipment used in the jewellery making process.
- (b) Create samples using appropriate tools and techniques to metalworking.
- (c) Use safe working practices throughout.

Outcome 2

Apply forming, soldering and surface decoration techniques to metal.

Performance Criteria

- (a) Demonstrate surface decoration techniques.
- (b) Demonstrate forming techniques.
- (c) Demonstrate soldering techniques.
- (d) Use safe working practices throughout.

Outcome 3

Produce assemblies using forming and surface decoration techniques.

Performance Criteria

- (a) Join components using appropriate soldering equipment.
- (b) Polish and finish the work piece using appropriate techniques.
- (c) Use safe working practices throughout.

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.

It is recommended that Outcome 3 is integrated with Outcomes 1 and 2 in that the properties of metal and equipment will be the same.

Product evidence and written/oral evidence will be produced to demonstrate that candidates have selected and used appropriate materials, techniques and working methods in the production of small assemblies using metalworking techniques. The evidence for this Unit must be produced under open-book conditions throughout delivery of the Unit, with progress monitored by teachers/lecturers on an ongoing basis.

Candidates will produce evidence of work that includes:

- ◆ A minimum of one sample for each of the following techniques:
 - drilling: drill a series of holes in a sample to corresponding marked points
 - piercing: the sample must accurately follow the required shape
 - filing: follow instructions for filing components
- ◆ A minimum of four samples which demonstrate:
 - surface decoration techniques, using four different methods of application
 - forming techniques, using two different forming techniques
 - soldering techniques, which are clean and free of excess solder
- ◆ A minimum of four assemblies using forming and surface decoration techniques, which have been manufactured using soldering techniques. These assemblies must have no obvious preparatory marks and be free of oxides and flux.
- ◆ Technical notes alongside samples, naming tools and equipment used for each sample

Carry out work in accordance with workplace instructions, suppliers' or manufacturers' instructions, safe use of equipment, materials and legal requirements.

Samples can be in any metal, but must take into consideration the properties of the metal chosen and the metal must be appropriate to each technique. The folio of work may be presented in a sketchbook, workbook or display board format and all assessment evidence must be retained.

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

The purpose of the Unit is to provide candidates with an introduction to the knowledge and practical skills required for a variety of jewellery making techniques, materials and tools.

The Unit is designed to enable candidates to apply the knowledge and skill gained to produce a series of assemblies using various techniques learned. The finished work should demonstrate effective selection, and use of materials and techniques; the application of correct finishing and safe working practices.

This Unit allows candidates to develop the necessary skills by creating samples of techniques through devised technical exercises. The emphasis and content of this Unit is technical, allowing candidates to concentrate on the processes. It may enhance their employability by teaching them the basic skills needed for metalworking and will increase their self development.

It may be beneficial for the candidate to have basic knowledge of art and design, visual awareness and the design process along with some experience of working in three dimensions, as this would help them to visualise their ideas.

This is an optional Unit within the National Certificate in Jewellery at SCQF level 6. It can also be delivered as a freestanding Unit. It is aligned to the following National Occupational standards (NOS) for Jewellery from Creative and Cultural Skills:

- J2.1 Contribute to keeping the workshop tidy and safe
- J2.2 Read jewellery manufacture or silversmithing drawings
- J2.3 Mark out and measure materials for jewellery or silverware components
- J2.4 Identify the basic properties of common precious metals and alloys used in jewellery or silversmithing
- J2.5 Cut and pierce jewellery or silverware components
- J2.6 File jewellery or silverware components
- J2.7 Produce formed jewellery or silverware components
- J2.8 Carry out permanent joining of jewellery or silverware components
- J2.9 Polish and finish jewellery or silverware components
- J3.5 Saw and pierce jewellery or silverware components
- J3.6 Form jewellery components

National Unit specification: support notes (cont)

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Guidance on learning and teaching approaches for this Unit

This Unit is intended to give candidates an opportunity to experience the range of preparative, fabrication and finishing techniques used in jewellery making. The practical nature of this subject area suggests that the most appropriate delivery would be by a combination of lecture, demonstrations, discussions and workshops. Exemplars would be advantageous to introduce candidates to planning and selection of appropriate construction and finishing methods.

Candidates should be introduced to a variety of basic techniques, including: filing, piercing, drilling, soldering and could be instructed on using different tools and equipment for a range of finishes. It may be beneficial for candidates to be given an understanding of the selection process used when deciding the appropriate techniques for a piece of jewellery.

Candidates should appreciate that what they are shown does not exhaust all possibilities and that the nature of the profession is that each new project can generate a new set of problems to which a solution must be devised.

Candidates should be encouraged to keep ongoing technical notes in a logbook, sketchbook or other appropriate format. Taking photographs, computer print outs, sketches would also be beneficial to the candidate.

Tutors could issue a brief providing guidance and inspiration and should explain the correct and safe working practises.

Open learning

This Unit is not suited to delivery by distance learning because it requires candidates to be supervised for health and safety requirements. It also requires the use of a fully equipped workshop. However if a centre has access to e-learning, it may be possible to submit evidence via an e-learning environment. This will have limited possibilities due to the practical nature of the Unit.

Guidance on approaches to assessment for this Unit

A suitable instrument for assessment for this Unit would be a practical exercise(s).

The finished assemblies produced for the Outcomes should be presented in a sequential format together with any relevant notes at the end of the Unit.

The use of an observation checklist could be used to record if the candidate is selecting the appropriate tools and equipment and using safe working practises.

Continuous assessment in the form of candidate/teacher/lecturer reviews may be used to assist candidates in the progression of their work.

National Unit specification: support notes (cont)

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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

There are opportunities to develop the Core Skills of *Communication*, *Working with Others* and *Problem Solving* in this Unit.

Communication could be developed by question and answer session in groups and in one to one coaching sessions to observe candidates in discussion with their peers and lecturers. Candidates are encouraged to compile technical notes on the techniques used, which could develop the Written Communication component of the core skill of *Communication*.

Working with Others could be developed throughout this Unit, where candidates have to work with others in negotiating the use of equipment and tools and workshop space. Candidates will also have to work closely with their tutors to discuss techniques.

Encouraging candidates to reflect and evaluate processes and techniques and to address their strengths and limitations, through class critiques and guidance will develop the Critical Thinking component of the core skill *Problem Solving*.

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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