



Higher National Unit specification

General information for centres

Unit title: Jewellery: Manufacturing Techniques

Unit code: F3Y7 34

Unit purpose: This Unit provides candidates with the skills required to accurately prepare metal for jewellery construction. Candidates will practice the techniques of measuring, marking, piercing, drilling, scoring and folding, annealing, forming and texturing, and study the properties of metals and the correct use of equipment and metal working tools. Candidates will apply a variety of joining techniques to metal and the use of finishing processes involved in the manufacture of jewellery.

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

- 1 Apply preparation techniques to metal.
- 2 Apply joining techniques to metal.
- 3 Apply finishing techniques to metal.

Credit points and level: 2 HN credits at SCQF level 7: (16 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: Access to this Unit will be at the discretion of the centre. It is not necessary for candidates to have had previous experience of jewellery manufacture techniques. However, it is recommended that candidates have a basic understanding of construction processes and terminologies. This could be demonstrated by possession of a group of Units at SCQF level 5/6 or portfolio.

Core Skills: There are opportunities to develop the Core Skills of *Communication*, *Working with Others* and the Critical Thinking component of *Problem Solving* at SCQF level 5 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: Evidence for this Unit will be generated by practical assessments and supporting technical notes. The Outcomes may be assessed on an individual basis or a combined assessment be used to cover all three.

Higher National Unit specification: statement of standards

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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

Apply preparation techniques to metal

Knowledge and/or Skills

- ◆ Measuring and marking
- ◆ Piercing
- ◆ Drilling
- ◆ Scoring and folding
- ◆ Annealing
- ◆ Forming
- ◆ Texturing
- ◆ Properties of metals
- ◆ Equipment

Evidence Requirements

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

- ◆ produce at least one sample for each of the following techniques:
 - measuring and marking. The sample must accurately transfer from a paper design to metal.
 - piercing. The sample must accurately follow the required shape.
 - drilling. Drill a series of holes in a sample to corresponding marked points
 - scoring and folding. A sample of metal scored and folded to produce a right angle must be produced.
 - forming. Anneal a sample of metal and form it.
 - texturing. Produce samples of metal that demonstrate four different texturing techniques.
- ◆ produce technical notes for each sample

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. Candidates must use the appropriate equipment for each technique.

Higher National Unit specification: statement of standards (cont)

Unit title: Jewellery: Manufacturing Techniques

Assessment Guidelines

Samples should be produced in line with the Evidence Requirements above. Technical notes must also be produced and could be presented in the form of sample boards, electronic formats or presented in a work/sketchbook.

Higher National Unit specification: statement of standards (cont)

Unit title: Jewellery: Manufacturing Techniques

Outcome 2

Apply joining techniques to metal

Knowledge and/or Skills

- ◆ Soldering
- ◆ Riveting
- ◆ Pickling

Evidence Requirements

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

- ◆ produce individual samples that apply the technique of soldering for each of the following:
 - wire on to sheet. This must be at a right angle.
 - two flat shapes. One must be small, one large and these must be soldered one on top of the other.
 - a strip of metal joined end to end.
 - two flat sheets joined at right angles.
- ◆ pickle all soldering samples to remove oxide and flux.
- ◆ produce one or more samples which demonstrate flat, tube and decorative riveting.
- ◆ produce technical notes for each sample.

All samples must be clean and free of excess solder.

Samples can be in any metal but candidates must take into consideration the properties of the metal chosen and the metal must be appropriate to each technique. Candidates must use the appropriate equipment for each technique.

Outcome 2 is integrated with Outcome 1 in that the properties of metal and equipment covered in Outcome 1 will be the same for this Outcome.

Assessment Guidelines

Samples should be produced in line with the Evidence Requirements above. Technical notes must also be produced and could be presented in the form of sample boards, electronic formats or presented in a work/sketchbook.

Higher National Unit specification: statement of standards (cont)

Unit title: Jewellery: Manufacturing Techniques

Outcome 3

Apply finishing techniques to metal

Knowledge and/or Skills

- ◆ Polishing
- ◆ Hand tools
- ◆ Equipment

Evidence Requirements

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

- ◆ produce one sample that must have an unmarked surface that is highly polished and free of obvious preparatory marks.
- ◆ produce a highly polished finish on one sample with decoration. The produced sample must be free of obvious preparatory marks.
- ◆ produce a matt finish on one sample with decoration. The produced sample must be free of obvious preparatory marks.
- ◆ produce technical notes for each sample produced.

Samples can be in any metal but take into consideration the properties of the metal chosen and the metal must be appropriate to each technique. Candidates must use the appropriate equipment for each technique.

Outcome 3 is integrated with Outcome 1 in that the properties of metal and equipment will be the same as for this Outcome.

Assessment Guidelines

Samples should be produced in line with the Evidence Requirements above. Technical notes must also be produced and could be presented in the form of sample boards, electronic formats or presented in a work/sketchbook. Alternatively, samples already produced for Outcome 1 could be used.

Administrative Information

Unit code: F3Y7 34

Unit title: Jewellery: Manufacturing Techniques

Superclass category: JH

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History of changes:

Version	Description of change	Date

Source: SQA

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Higher National Unit specification: support notes

Unit title: Jewellery: Manufacturing Techniques

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 80 hours.

Guidance on the content and context for this Unit

Whilst this Unit may be delivered as a standalone Unit it has been designed as a key building block for the Jewellery HNC/HND and provides candidates with the underpinning knowledge of the construction and finishing techniques for jewellery manufacture required throughout the Group Award and in the industry. Within the jewellery profession there is a requirement for accuracy and high quality finishing.

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 only.

Corresponding to the Outcomes, the Unit will cover the three main areas of jewellery making:

- ◆ applying preparation techniques to metal
- ◆ applying joining techniques to metal
- ◆ applying finishing techniques to metal

Technical notes should accompany all samples that show that candidates has understand the process and its function.

Guidance on the delivery and assessment of 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.

The sequence of delivery of the Outcomes is not critical as each topic can be covered separately. However, 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.

The samples created for the Outcomes should be presented in a sequential and professional manner together with the relevant technical notes.

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.

Higher National Unit specification: support notes (cont)

Unit title: Jewellery: Manufacturing Techniques

Opportunities for developing Core Skills

There are opportunities to develop the Core Skills of *Communication*, *Working with Others* and the Critical Thinking component of *Problem Solving* at SCQF level 5 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 required 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 to address their strengths and limitations will develop the Critical Thinking component of the Core Skill *Problem Solving*.

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.

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. Further advice can be found in the SQA document *Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs* (www.sqa.org.uk).

General information for candidates

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Lectures, demonstrations and practical workshops will allow you to develop an understanding and the skills required through the use various techniques to manufacture a piece of jewellery.

Examples will be used to demonstrate what is acceptable within the industry.

In order to complete this Unit satisfactorily, you must produce sample pieces of work, which demonstrate your ability to use the tools and equipment used in the manufacture of jewellery. A technical notebook documenting all techniques will also form part of your submission.

On successful completion of the Unit you will be able to:

- 1 Apply preparation techniques to metal.
- 2 Apply joining techniques to metal.
- 3 Apply finishing techniques to metal.

There are opportunities to develop the Core Skills of *Communication*, *Working with Others* and the Critical Thinking component of *Problem Solving* at SCQF level 5 in this Unit.