Higher National Unit specification

General information for centres

Unit title: Jewellery: Rub-over Setting Techniques

Unit code: F3Y9 34

Unit purpose: This Unit is designed to enable candidates to develop the underpinning knowledge and practical skills required to manufacture jewellery mounts and set gemstones using rub-over setting techniques. The Unit will allow candidates to develop skills in tool and mount preparation, as well as a practical knowledge of gemstone properties relevant to the stone setter.

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

1 Describe the physical properties of gemstones.
2 Manufacture jewellery mounts.
3 Set gemstones in jewellery mounts.

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: Entry to this Unit is at the discretion of the centre. Candidates would benefit from having undertaken NQ Unit D0L1 12 *Jewellery: Stonesetting*.

Core Skills: There are opportunities to develop the Core Skills of *Problem Solving* at SCQF level 6, *Working with Others* at SCQF level 5, and the Using Number component of *Numeracy* 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: Outcome 1 may be assessed by an assignment. Outcomes 2 and 3 will be assessed by product evidence of the manufacture of jewellery mounts and the setting of gemstones in jewellery mounts.

Higher National Unit specification: statement of standards

Unit title: Jewellery: Rub-over Setting Techniques

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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

Describe the physical properties of gemstones

Knowledge and/or Skills

- Gemstones
- Colour
- Opacity
- Mohs' Scale of hardness
- Directional properties
- Elements of risk

Evidence Requirements

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

- describe the physical properties of the following gemstones: diamond, ruby, sapphire, emerald, aquamarine, amethyst, citrine, smoky quartz, garnet, opal, tourmaline, topaz, peridot, spinel, moonstone, nephrite, jadeite, turquoise, malachite, zircon. For each of the gemstones candidates must describe:
  - colour and opacity.
  - Mohs' scale of hardness.
  - directional properties which must include cleavage, parting and fracture.
- identify any notable elements of risk where applicable.

Assessment Guidelines

Candidates could complete the assessment in the form of an assignment.

Higher National Unit specification: statement of standards (cont)

Unit title: Jewellery: Rub-over Setting Techniques

Outcome 2

Manufacture jewellery mounts

Knowledge and/or Skills

- Gemstone cuts
- Jewellery mounts
- Hand manufacturing techniques

Evidence Requirements

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

- identify the following gemstone cuts: cabochon, round brilliant, princess, trillion, pear, marquise
- manufacture one jewellery mount suitable for a round cabochon cut gemstone in response to a given brief
- manufacture one jewellery mount suitable for a round brilliant cut gemstone in response to a given brief

In manufacturing the above jewellery mounts, candidates must use the following hand manufacturing techniques: filing, soldering, hammering and bending.

The jewellery mount size must be commensurate with the dimensions specified in the given brief.

Assessment Guidelines

The practical assessment for this Outcome may be combined with that from Outcome 3 to form a single practical assessment.

Outcome 3

Set gemstones in jewellery mounts

Knowledge and/or Skills

- Setting tools
- Jewellery mounts
- Rub-over techniques
- Finishing techniques

Higher National Unit specification: statement of standards (cont)

Unit title: Jewellery: Rub-over Setting Techniques

Evidence Requirements

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

- set one jewellery mount securely with a round cabochon cut gemstone
- set one jewellery mount securely with a round brilliant cut gemstone
- use the following setting tools: bezel roller, burnisher
- apply the setting and finishing techniques without incurring damage to the gemstone and provide a smooth finished edge

Assessment Guidelines

The practical assessment for this Outcome may be combined with that from Outcome 2 to form a single practical assessment.

Administrative Information

Unit code: F3Y9 34

Unit title: Jewellery: Rub-over Setting Techniques

Superclass category: JH

Original date of publication: August 2008

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History of changes:

Version	Description of change	Date

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Higher National Unit specification: support notes

Unit title: Jewellery: Rub-over Setting 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 40 hours.

Guidance on the content and context for this Unit

This Unit has been written in order to allow candidates to develop skills in the manufacture of jewellery items using 'Rub-over' stone setting techniques.

Outcome 1 has been written to allow candidates to research common gemstones encountered in the jewellery industry and to understand the differing physical properties and risks associated with setting more fragile gemstones.

Outcome 2 and 3 are essentially practical Outcomes where each candidate will gain experience in setting the following gemstone cuts:

- Round Cabochon Cut
- Round Brilliant Cut

It is also anticipated that candidates could be provided with samples or demonstrations of more advanced/difficult shapes such as:

- Princess Cut
- Pear Shaped Brilliant
- Marquise Shaped Brilliant

To reflect a range of abilities, and although the assessment should be limited to simple round cabochon and facetted stones, the lecturer may find it useful to set formative projects with these more challenging gemstone shapes to any candidates who completes work in advance of any completion dates.

For Outcome 3, it may be appropriate for the lecturer to provide candidates with pre-cast samples of rub-over mounts to allow each candidate to practice the techniques before completing the assessment project.

Guidance on the delivery and assessment of this Unit

It is recommended that lecturers provide a range of short exercises allowing candidates to gain experience in setting a range of gemstones using rub-over techniques.

This could allow candidates to build up a range of competences in the stone setting practice, culminating in a more challenging assessment project over the final nine hours of the Unit.

Higher National Unit specification: support notes (cont)

Unit title: Jewellery: Rub-over Setting Techniques

Some cross assessment with regards to the final project may be desirable specifically with regards to other practical Units, which make up the Jewellery HNC/HND Group Award.

Candidates may find it beneficial to complete this Unit prior to undertaking other stone setting Units in the Jewellery HNC/HND.

Opportunities for developing Core Skills

There are opportunities to develop the Core Skills of *Problem Solving* at SCQF level 6, *Working with Others* at SCQF level 5, and the Using Number component of *Numeracy* at SCQF level 5 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Candidates will be required to analyse and seek solutions to a range of practical issues involved in the Rub-over setting of gemstones. They will also be required to overcome problems associated with the precision aspects of Rub-over setting. This will provide candidates with opportunities to develop *Problem Solving* at SCQF level 6.

The Using Number component of *Numeracy* may be developed at SCQF level 5 if candidates calculate various dimensions of gemstones in the early stages of the planning process. This would involve accurate measurements and calculations based on diameter and circumference.

Working with Others may be developed at SCQF level 5, as candidates will have to negotiate with fellow candidates as to the use of shared resources in the workshop environment.

Open learning

This Unit could be delivered by distance learning. However, it would require planning by the centre ensure the sufficiency and authenticity of candidate evidence. Completion of the Unit will also require access to specialist equipment and tools.

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

Unit title: Jewellery: Rub-over Setting Techniques

This Unit will provide you with the underpinning knowledge and skills required to:

1 Determine the hardness and durability of gemstones with particular reference to the working jeweller who undertakes their own setting work.
2 Prepare materials and manufacture settings that are suitable for the rub-over method of gem setting on round cabochon and round brilliant cut gemstones.
3 Reliably set a range of gemstones using rub-over setting techniques.

In Outcome 1 you will describe a range of commercially available gemstones with particular attention to their physical properties.

In Outcome 2 you will hand make mounts suitable for round cabochon and round facetted gemstones. These will be manufactured from sheet metal and/or wire and will require a high level of accuracy.

In Outcome 3 you will set a range of round cabochon and round facetted gemstones. After some practice, you will proceed to set gemstones in the mounts you have made for Outcome 2. The finished setting work should be carried out in a professional manner leaving a smooth finished edge around the gemstone and causing no abrasion damage to the gemstone during the setting process. You will submit the finished and set mounts for assessment.

There are opportunities to develop the Core Skills of *Problem Solving* at SCQF level 6, *Working with Others* at SCQF level 5, and the Using Number component of *Numeracy* at SCQF level 5 in this Unit.