



QCF Unit and Assessment Specification

Unit title	Form Jewellery Components using Advanced Techniques
Ofqual Unit code	K/506/2415
SQA Unit code	H754 80
SSC Ref	J4.4

History of changes

Publication date: August 2014

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Version number	Date	Description	Authorised by

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QCF Unit specification

Title	Form Jewellery Components using Advanced Techniques	
Level	4	
Credit value	20	
Learning Outcomes	Assessment Criteria	
The learner will:	The learner can:	
1 Understand the parameters of advanced jewellery component development.	1.1 Critically evaluate how the design of secure jewellery settings is influenced by the principles of gemmology.	1.2 Describe the advanced techniques used to develop secure gemstone settings.
	1.3 Describe how to identify the physical and working properties of materials used in jewellery manufacture.	1.4 Critically evaluate how the physical properties of materials may be utilised when forming jewellery components.
2 Know how to form jewellery components using advanced techniques.	2.1 Describe the specific safety precautions to be taken when using hand and machine tools.	2.2 Explain how advanced jewellery design ideas can be communicated to colleagues.
	2.3 Illustrate the methods used to calculate dimensional information for producing jewellery components.	2.4 Describe the methods that can be used to form three-dimensional jewellery forms.
	2.5 Describe the selection decision used to plan for the formation of jewellery components. Items should include:	<ul style="list-style-type: none"> ◆ correct tools ◆ materials ◆ processes ◆ making jigs ◆ other aids

Learning Outcomes The learner will:	Assessment Criteria The learner can:
	<p>2.6 Describe how to apply and use additional forming techniques to fabricate advanced jewellery products.</p> <p>2.7 Describe how CNC and laser technologies can be applied in the production of advanced jewellery products.</p> <p>2.8 Describe how to evaluate finished work pieces for dimensional accuracy.</p>
<p>3 Be able to form jewellery components using advanced techniques.</p>	<p>3.1 Accurately produce jewellery components using a range of advanced techniques including:</p> <ul style="list-style-type: none"> ◆ making custom tools/jigs ◆ formers, swages, mandrels ◆ drawing metal ◆ multi-part items ◆ hand piercing ◆ plier work <p>3.2 Implement checks to ensure that completed components are:</p> <ul style="list-style-type: none"> ◆ dimensionally accurate ◆ correctly formed ◆ free from excessive tooling ◆ free from excessive stretching ◆ free from blemishes <p>3.3 Produce components through dry assembly to confirm that the components fit to the correct tolerance prior to final fixing.</p>

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
<p>4 Be able to evaluate own activity to improve future performance.</p>	<p>4.1 Assess the relative success of the methods used to identify areas for improvement.</p> <p>4.2 Evaluate industry research and information to identify where new methods can be used.</p> <p>4.3 Develop conclusions as to how new methods can be improved.</p> <p>4.4 Make recommendations as to how new methods might be effectively be implemented.</p>

Additional information about the Unit
Unit purpose and aim(s)
This Unit enables the learner to develop the skills and knowledge required to design and make more complex jewellery components using advanced techniques.
Unit expiry date
31 December 2015
Details of the relationship between the Unit and relevant National Occupational Standards (if appropriate)
The Unit is based on the NOS performance indicators, and Knowledge and Understanding National Occupational Standard Unit J4.4 Form Jewellery Components Using Advanced Techniques.
Details of the relationship between the Unit and other standards or curricula (if appropriate)
N/A
Assessment requirements specified by a sector or regulatory body (if appropriate)
Cultural and Creative Skills
Endorsement of the Unit by a sector or other appropriate body (if required)
N/A
Location of the Unit within the subject/sector classification system
9.2 Crafts, Creative Art and Design
Name of the organisation submitting the Unit
Scottish Qualifications Authority
Availability for use
Shared
Availability for delivery
August 2014
Guided Learning Hours
154

QCF Assessment specification

Assessment (evidence) Requirements

The learner should submit a technical journal/workbook, describing the following.

Learning Outcome 1

The techniques used to develop secure gemstone settings. How to identify the materials used physical and working properties. Critically evaluate the influence off gemmology on the design of secure jewellery settings and how the physical properties of materials are employed when forming jewellery components.

Learning Outcome 2

An explanation of methods of communicating jewellery ideas to colleagues, an illustration of the methods used to calculate dimensions. The techniques used to form jewellery in three dimensions. The appropriate selection of tools, materials, processes, jigs and other aids and how CNC and laser equipment may be used in the production of jewellery. Health and safety procedures for using hand and machine tools.

Learning Outcome 3

Product evidence in the form of jewellery components accurately made using a range of techniques including custom tools jigs, formers, swages, mandrels, metal drawing, piercing, pliers. A checklist to ensure all completed components are dimensionally accurate, correctly formed, free from excessive tooling and stretching and free from blemishes.

Learning Outcome 4

The journal/workbook should include an evaluation of the Outcomes of the Unit including the success of methods used and possible areas for improvement. Industry research identifying new methods, and how improvements might be made.

The evidence could be assessed orally with checklists where appropriate.

Guidance on Instruments of Assessment

Learning Outcome 1

Checklist for all the Evidence Requirements above.

Learning Outcome 2

Checklist for all the Evidence Requirements above.

Learning Outcome 3

Assessment checklist for product evidence.

Learning Outcome 4

Checklist for all the Evidence Requirements above.