



Higher National Unit specification

General information for centres

Unit title: Ceramic Moulds for Glass Forming

Unit code: F1XX 35

Unit purpose: This Unit is designed to provide the candidate with an understanding of mould-making, glass slumping, glass draping, and ceramic glazing techniques and processes. It will provide the candidate with the opportunity to apply existing design process and hand-building skills to produce a clay model for production in a plaster mould. Two casts will be taken from the mould and fired to bisque, one of which will be glazed and the other used for glass forming.

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

- 1 Design a plaster mould for ceramic production.
- 2 Make a plaster mould for ceramic production.
- 3 Produce two ceramic pieces from the mould.
- 4 Form glass on one ceramic piece and glaze the other.

Credit points and level: 2 HN credits at SCQF level 8: (16 SCQF credit points at SCQF level 8*)

**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:

Core Skills: There are opportunities to develop the Core Skills of Problem Solving, Planning and Organising and Critical Thinking in this Unit at SCQF level 6 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: The assessment for this Unit will be via product evidence for Outcomes 1 to 4, as each Outcome is dependent on the success of the previous one.

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

Design a plaster mould for ceramic production

Knowledge and/or Skills

- ◆ Research
- ◆ Design process
- ◆ Analytical visuals
- ◆ Mould principles
- ◆ Mould processes
- ◆ Material selection
- ◆ Firing process

Evidence Requirements

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

- ◆ create a design for a ceramic production mould with walls of an even thickness and a flat base for stability when packing or filling

Evidence should be presented in a form that contains referenced, annotated visual material detailing ideas, techniques, materials and processes.

Assessment Guidelines

Tutors could monitor individual candidate progress using discussion and direct observation and should ensure that this Outcome has been achieved before progressing to Outcome 2.

Candidates could provide responses to a series of questions demonstrating their understanding of the principles of moulds, the mould-making process and the firing process, or a checklist could be used by the tutor to evidence oral responses.

Higher National Unit specification: statement of standards (cont)

Unit title: Ceramic Moulds for Glass Forming

Outcome 2

Make a plaster mould for ceramic production

Knowledge and/or Skills

- ◆ Materials handling skills
- ◆ Production process
- ◆ Planning and organising
- ◆ Tools and equipment
- ◆ Weighing and measuring
- ◆ Safe working practice

Evidence Requirements

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

- ◆ hand-build a model
- ◆ set up fences or a cottle
- ◆ mix plaster to correct ratio and consistency
- ◆ pour mould without creating air pockets
- ◆ meet health and safety requirements when using ceramic materials
- ◆ demonstrate safe, tidy and considerate approaches to studio work practices

Evidence should be presented in the form of a well-finished functional mould suitable for producing ceramic pieces.

The tutor should record evidence of compliance with safe working practices on a checklist.

Assessment Guidelines

This Outcome must be achieved to a satisfactory standard before progressing to the next Outcome.

Higher National Unit specification: statement of standards (cont)

Unit title: Ceramic Moulds for Glass Forming

Outcome 3

Produce two ceramic pieces from the mould

Knowledge and/or Skills

- ◆ Production process
- ◆ Planning and organising
- ◆ Tools and equipment
- ◆ Materials handling skill
- ◆ Safe working practice

Evidence Requirements

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

- ◆ select material and appropriate method of filling mould
- ◆ identify the clay at leather-hard state to remove safely from the mould
- ◆ prepare the pieces for firing
- ◆ meet health and safety requirements when using ceramic materials
- ◆ demonstrate safe, tidy and considerate approaches to studio work practices

Evidence for this Outcome should be presented in the form of two well-finished ceramic pieces which are suitable for the ceramic glazing and glass slumping processes.

Assessment Guidelines

This Outcome must be achieved to a satisfactory standard before progressing to the next Outcome.

Higher National Unit specification: statement of standards (cont)

Unit title: Ceramic Moulds for Glass Forming

Outcome 4

Form glass on one ceramic piece and glaze the other

Knowledge and/or skills

- ◆ Production process
- ◆ Planning and organising
- ◆ Materials
- ◆ Tools and equipment
- ◆ Materials handling skill
- ◆ Safe working practice

Evidence Requirements

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

- ◆ select and apply appropriate ceramic glaze
- ◆ prepare ceramic mould and glass for forming
- ◆ prepare the pieces for appropriate firings
- ◆ present finished pieces
- ◆ meet health and safety requirements when using ceramic materials
- ◆ demonstrate safe, tidy and considerate approaches to studio work practices

Evidence for this Outcome should be presented in the form of a glazed ceramic piece and a formed glass piece.

Assessment guidelines

This Outcome could be assessed on its own or as part of a holistic assessment for the whole Unit.

Administrative Information

Unit code: F1XX 35

Unit title: Ceramic Moulds for Glass Forming

Superclass category: WF

Original date of publication: August 2007

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History of changes:

Version	Description of change	Date

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Higher National Unit specification: support notes

Unit title: Ceramic Moulds for Glass Forming

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

This Unit is designed to involve the candidates in the design and production of functioning moulds for the production of ceramic pieces. The functional or decorative ceramic products can be glazed or serve as a mould for glass forming.

Candidates will need to be made aware of the principles of firing ceramics, the principles of moulds and the mould-making process. Relevant current Health and Safety legislation should be explained to the candidates and the tutor should record candidate's adherence to these, using a checklist.

Individual or group tutorials could promote the use of reflective questioning approaches and assist in the development process. It could also help to ensure that candidates are working to the required standard.

Guidance on the delivery and assessment of this Unit

This Unit has been developed as part of the HNC/HND Art Glass Production Group Awards frameworks. It is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes. Opportunities may be taken to link or integrate with other aspects of the course and a thematic approach adopted for both delivery and assessment.

The brief should be drawn up by the candidate in consultation with the tutor.

All Outcomes should be delivered in sequence. Tutors should provide exemplars of practising glass/ceramic artists' work and demonstrate practical elements step by step.

Candidates should be encouraged to share their research findings from the outset so they can receive feedback from tutors. Tutorial support on an ongoing basis should facilitate and support the learning process.

At all times tutors and candidates should ensure that they observe health and safety requirements.

Opportunities for developing Core Skills

A number of Core Skills and/or Core Skills components could be developed or further enhanced as candidates undertake this Unit and apply theoretical knowledge to a complex practical task. Candidates could be supported in the use of recognised research techniques to encourage analysis of the working practice and approaches used by glass/ceramic artists and/or designers. Some elements of the Core Skill Problem Solving could be developed and enhanced as candidates respond to design problems, plan, organise and complete tasks.

Higher National Unit specification: support notes

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Open learning

The practical nature of parts of this Unit would make it difficult to deliver on an open/distance learning basis.

For further information on open learning, please see the SQA guide, *Assessment and Quality Assurance of Open and Distance Learning* (www.sqa.org.uk).

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: Ceramic Moulds for Glass Forming

In this Unit you will explore the mould-making process, glazing and glass forming techniques. You will be made aware of the physical and chemical changes to the clay that take place during the firing process and what implication this could have on the design specification.

For Outcome 1 you will be asked to design a plaster mould. The purpose of the mould is to produce decorative or functional ceramic pieces that can serve as objects in their own right, or as moulds for forming glass. You will be asked to provide annotated sketches and drawings of the proposed mould.

For Outcome 2 you will be asked to make a plaster mould. You will make a hand-built clay model for the mould and produce the mould itself. This mould should function properly and be well finished.

For Outcome 3 you will be required to cast two pieces from the mould which should be cleaned up and prepared for firing.

For Outcome 4 you will be asked to apply ceramic glaze to one of the pieces and to prepare and use the other as a ceramic mould for slumping or draping glass.

You will also be required to produce a clearly documented sketchbook/workbook detailing ideas, techniques, materials and processes.