National Unit specification: general information

Unit title: Screen Printing: An Introduction to the Process (SCQF Level 5)

Unit code: FV51 11

Superclass: KH

Publication date: October 2011

Source: Scottish Qualifications Authority

Version: 02

Summary

This Unit is designed to enable the candidate to understand the principles of the screen printing process and the techniques used, in particular the characteristics and features of the process. The candidate will gain basic practical experience of materials, tools, equipment and in the techniques used. This Unit is mandatory within the National Certificate in Screen Printing at SCQF level 5. It can also be taken as a free standing Unit. It is suitable for school leavers and adult learners who are undertaking a screen printing course or who are already working in the industry. This Unit is mainly practical based with some elements of theory and will be delivered in a workshop environment.

Outcomes

1   Describe the basic principles of screen printing, the techniques used and the features of the process.
2   Develop a suitable design for screen printing using various image resources and pre-press software.
3   Prepare film separations and produce stencils ready for two-colour print production
4   Produce final prints using hand bench equipment.

Recommended entry

Entry is at the discretion of the centre.

General information (cont)

Unit title: Screen Printing: An Introduction to the Process (SCQF Level 5)

Credit points and level

1 National Unit credit at SCQF level 5: (6 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

Achievement of this Unit gives automatic certification of the following Core Skills component:

♦ Critical Thinking at SCQF level 5
♦ Planning and Organising at SCQF level 5

There are also opportunities to develop aspects of Core Skills which are highlighted in the Support Notes of this Unit specification.

National Unit specification: statement of standards

Unit title: Screen Printing: An Introduction to the Process (SCQF Level 5)

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

Describe the basic principles of screen printing, the techniques used and the features of the process.

Performance Criteria

(a) Describe the principles of the screen printing process.
(b) Describe the characteristics and features of the screen printing process and relate this to types of work.
(c) Describe the processes and techniques used for producing a screen print from origination to final prints.

Outcome 2

Develop a suitable design for screen printing using various image resources and pre-press software.

Performance Criteria

(a) Identify from various sources a range of screen printing images.
(b) Prepare a design original suitable for film in two colour separations.

Outcome 3

Prepare film separations and produce stencils ready for two-colour print production

Performance Criteria

(a) Prepare film colour separations for a two-colour project ready for stencil making.
(b) Select screens using the appropriate screen count that is suitable for substrate type and design characteristics.
(c) Produce photographic stencils suitable for accurate image reproduction.

Outcome 4

Produce final prints using hand bench equipment.

Performance Criteria

(a) Prepare and make ready hand bench equipment for printing.
(b) Select ink and colour suitable for design concept and substrate being printed.
(c) Print colour separations in accurate register.
(d) Present error free prints.

National Unit specification: statement of standards (cont)

Unit title: Screen Printing: An Introduction to the Process (SCQF Level 5)

Evidence Requirements for this Unit

Evidence is required to demonstrate that candidates have achieved all Outcomes and Performance Criteria.

Evidence is required to demonstrate that the candidates have achieved all of the Outcomes and Performance Criteria. All activities must be carried out in compliance with current Health and Safety legislation with particular reference to the legislation affecting the machinery, equipment and materials used in the printing industry.

Product evidence and written and/or oral recorded evidence is required that demonstrates that the candidate has achieved all Outcomes and Performance Criteria. The candidate will produce a holistic folio of work that includes:

Outcome1: Written and /or recorded oral

A written or recorded oral response completed by the candidate under supervised and open-book conditions. The candidate will present facts and reasoned judgments on the areas studied and will show knowledge and understanding of the screen printing process.

Candidates should be able to explain:
♦ principle technique used in the process the five stages of the process - origination, artwork, stencil, colour and print
♦ characteristics of the design and work produced by the candidate: line work, halftone, fine detail, colour selection, materials being printed
♦ a minimum of three characteristics connected to the printed project
♦ terminology used during their practical work, giving a minimum of three

Outcomes 2—4: Performance/product evidence

Evidence must include:
♦ three different images from source
♦ construction of film separations of a two colour design in preparation for stencil making
♦ production of stencils for two colour printing
♦ preparation and set up of hand bench equipment for printing safely
♦ selection of ink that is appropriate for substrate and colour that conforms to product design artwork
♦ production of five prints accurately registered, free from blemishes and compliant with the design artwork and industry standard

Assessment will be conducted under open-book conditions.

National Unit specification: support notes

Unit title: Screen Printing: An Introduction to the Process (SCQF Level 5)

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

If this Unit is being delivered as part of a programme of screen printing based Units, then it is recommended that centres consider an integrated delivery approach with other Units in the award. This is a mandatory Unit within the National Certificate in Screen Printing at SCQF level 5. It can also be taken as a freestanding Unit.

As screen printing is such a diverse application, this Unit could also be integrated with other areas of the creative industries such as, art and design, exhibition, sign works, textiles, glassware, joinery etc. Candidates therefore have a wide scope for progression within the creative industries by further development through further education or progression into work.

In this Unit the candidates are required to understand the basic screen printing process to enable them to complete a finished product. Through the development of this Unit the candidates will learn various aspects of screen printing such as, screen printing terminology, development of their basic creative design concepts, structure their production time with planning, understand equipment, materials and techniques in the production of a basic developed printed project.

The emphasis should be on acquiring knowledge and understanding of the principles of the screen printing process, image types, film colour separations and stencil making suitable for the screen printing process that can progress to a finished solution. The teacher/lecturer should encourage group discussion and review a range of basic designs and images used in the screen printing process to allow the candidate to make an informed design selection.

Each candidate should be given the opportunity to develop and produce a final screen print with skill and precision, accurate colour registration and be able to evaluate and critique their own work and remedy any common faults that may occur to achieve quality print presentation.

National Unit specification: support notes (cont)

Unit title: Screen Printing: An Introduction to the Process (SCQF Level 5)

This Unit is knowledge based and aligns to the following National Occupational Standards from Proskills:

♦ Comply with Health and Safety in the Workplace (021)
♦ Improve your performance at work (022)
♦ Ensure your own actions reduce risks to Health and Safety in the Workplace (031)
♦ Improve individual and organisational performance (032)
♦ Contribute to maintaining equipment in working order (003).
♦ Prepare equipment and machines for screen printing (239)
♦ Operate screen printing machines (204)
♦ Control screen printing machines (231)
♦ Operate ink drying equipment (204)
♦ Prepare Inks (206)
♦ Prepare stencils for printing (219).
♦ Plan image layout for printing (102)
♦ Identify and organize the requirements for production (006)
♦ Control ink drying equipment (231)

Guidance on learning and teaching approaches for this Unit

Throughout this activity-based Unit candidates should have the opportunity to learn about various methods of screen printing and how they are applied, ink selection to suit materials used, screen and stencils to suit designs and the printing technique used to produce their finished product.

Learning approaches for Outcomes 2 to 4 should be activity based with the assessor demonstrating methods at appropriate stages, thereafter working individually, encouraging self-evaluation throughout the different tasks.

The candidates should be given comprehensive teaching notes/explanation, which would include details of basic screen printing processes, terminology, equipment and materials.

For Outcome 1, the assessor should prepare short answer questions, which can be answered orally or written by the candidate. These should cover the knowledge of methods, processes, equipment, materials, good working practices and terminology.

The candidate should be encouraged to work independently exploring images, materials used and the different techniques within the screen printing process. The teacher/lecturer exposition of developmental skills in the screen printing application this should be complemented by individual and/or group research and discussion into the different styles and techniques used in the design and production of screen prints. Further to this exploration the teacher/lecturer could arrange visits to a variety of different companies involved in the creative industries.

Candidates are to be visually assess their final prints to their design original, this will reinforce the focus and quality of their reflective practice.

National Unit specification: support notes (cont)

Unit title: Screen Printing: An Introduction to the Process (SCQF Level 5)

Guidance on approaches to assessment for this Unit

Candidates should be aware of assessment criteria and instruments. Centres may use the instruments of assessment, which are considered to be the most appropriate. Continuous assessment may be used to assist candidates in their work.

Examples of instruments of assessment that could be used:

Outcomes 2—4: Practical exercise (observation checklist)

During the progression of this Unit, candidates will have several opportunities to develop their practical skills and should be assessed at appropriate points. Terminology should be presented in context throughout this Unit. While it is recognised that there will be correlations between items of evidence, the nature and purpose of different Outcomes should be recognised and promoted.

The evaluation of the completed project can be assessed through observation checklist this will include the developmental process for the artwork, stencils and finished product of five prints that corresponds to the candidate's original design.

Outcome 1: Written/oral response — (restricted response questions)

A written or recorded oral response completed by the candidate under supervised open-book conditions; the candidate will present facts and reasoned judgments on the areas studied and will show knowledge and understanding of the screen printing process.

Assessment approaches would be in the form of a questionnaire covering the five stages of the screen printing process through the study of books, handouts, research and practical experience the candidate should be able to explain:
♦   principle technique used in the process the five stages of the process — origination, artwork, stencil, colour and print
♦   characteristics of the design and work produced by the candidate, eg line work, halftone, fine detail, colour selection, materials being printed, etc, explain a minimum of three characteristics connected to the printed project
♦   terminology used during their practical work giving a minimum of three

Where the candidate is unsuccessful in achieving an Outcome, provision should be made for remediation and reassessment in this Unit.

National Unit specification: support notes (cont)

Unit title: Screen Printing: An Introduction to the Process (SCQF Level 5)

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 social software. 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

In this Unit candidates will develop their skills and techniques in screen printing. Candidates will prepare artwork for a two-colour project, identifying essential screen printing information with regards to materials, tools and equipment before preparing and implementation of a visual presentation.

Candidates while proceeding through this Unit, will have opportunities to develop aspects of the following Core Skills:

♦   *Problem Solving* through participation in the creative process which demands critical thinking and planning for the development of ideas and concepts
♦   *Information and Communication Technology (ICT)* if they use the internet for research purposes, reports or relevant software packs.

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
02	Core Skills Components Critical Thinking and Planning and Organising at SCQF level 5 embedded.	12/10/2011