



National Unit specification: general information

Unit title: Monochrome Film Processing and Printing (SCQF level 6)

Unit code: FV1D 12

Superclass: KE

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Summary

The purpose of this Unit is to provide candidates with a basic understanding of the processes and procedures involved in the production of monochrome materials and to successfully produce monochrome negatives and prints. They will learn about the basic structure of monochrome materials and both film and print processing and print enlargement techniques.

This Unit is suitable for candidates who have an interest in Silver Halide photographic processes. On completion of this Unit candidates should be able to progress to Photography: Darkroom Techniques DW81 34 (SCQF level 7)

Outcomes

- 1 Explain the properties and structure of monochrome materials.
- 2 Demonstrate understanding of monochrome processing.
- 3 Produce monochrome negatives.
- 4 Produce monochrome prints.

Recommended entry

While entry is at the discretion of the centre, candidates would normally be expected to have attained one of the following, or equivalent; Photography: An Introduction (SCQF level 5), Photography: Manipulative Processes (SCQF level 6).

Credit points and level

1 National Unit credit at SCQF level 6: (6 SCQF credit points at SCQF level 6*)

**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.*

National Unit specification: general information (cont)

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Core Skills

Opportunities to develop aspects of Core Skills are highlighted in the Support Notes of this Unit specification.

There is no automatic certification of Core Skills or Core Skill components in this Unit.

National Unit specification: statement of standards

Unit title: Monochrome Film Processing and Printing (SCQF level 6)

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

Explain the properties and structure of monochrome materials.

Performance Criteria

- (a) Explain the effect of light on silver halide crystals.
- (b) Explain the structure of monochrome film material.
- (c) Explain the structure of monochrome paper material.

Outcome 2

Demonstrate an understanding of monochrome processing.

Performance Criteria

- (a) Describe the role of all processing solutions.
- (b) Explain the effects of time on the development of film materials.
- (c) Explain the effects of temperature on the development of film materials.
- (d) Explain the effects of agitation on the development of film materials.
- (e) Describe the use of wetting agent, wash bath and correct film drying procedures.
- (f) Describe the use of correct health and safety procedures required for the safe processing of monochrome materials.

Outcome 3

Produce monochrome negatives.

Performance Criteria

- (a) Handle exposed monochrome film material appropriately.
- (b) Use manufacturer's data sheets correctly.
- (c) Use processing solutions correctly.
- (d) Carry out processing stages correctly.
- (e) Identify indicators of correctly processed monochrome negatives.
- (f) Adhere to correct health and safety procedures for the processing of monochrome negatives.

National Unit specification: statement of standards (cont)

Unit title: Monochrome Film Processing and Printing (SCQF level 6)

Outcome 4

Produce monochrome prints.

Performance Criteria

- (a) Produce prints demonstrating control of the enlarger.
- (b) Produce prints demonstrating control of contrast range.
- (c) Produce prints demonstrating control of tonal range.
- (d) Produce prints demonstrating control of localised exposure.
- (e) Produce prints demonstrating appropriate presentation.
- (f) Adhere to correct health and safety procedures for the processing of monochrome prints.

Evidence Requirements for this Unit

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

Outcome 1

Written and/or oral recorded evidence generated under closed book conditions is required to demonstrate that the candidate can explain the properties and structure of monochrome materials.

Explanation must include reference to — changes triggered in silver halide grains by light causing them to become developable; gelatine as binding agent; emulsion; grain size, film speed, resolution; use of dye-sensitisers to tailor spectral sensitivity of emulsion.

Outcome 2

Written and/or oral recorded evidence generated under closed book conditions is required to demonstrate the candidate's understanding of monochrome processing

Evidence must include reference to — solvent (water); developing agents; accelerator; restrainer; preservative; stop-bath; fixer; time, temperature, agitation.

Outcome 3

Evidence of achievement in this Outcome will be provided by written and/or oral recorded evidence and product evidence. Candidates are required to correctly process exposed monochrome film on more than one occasion. The negatives must be accompanied by written and/or oral explanation of technical details and processing involved in their production. Written and/or oral evidence will be produced under open-book conditions.

National Unit specification: statement of standards (cont)

Unit title: Monochrome Film Processing and Printing (SCQF level 6)

Outcome 4

Evidence of achievement in this Outcome will be provided by written and/or oral recorded evidence and product evidence. Candidates are required to produce a minimum of four finished prints from a minimum of three different negatives, demonstrating:

- Control of the enlarger
- Informed exposure assessment through the correct use of test strips/prints
- Localised exposure control through dodging and burning techniques
- An understanding of tonal possibilities of the paper.
- Appropriate presentation techniques

Prints must be a minimum size of 8x6". The prints must be accompanied by written and/or oral recorded explanation of technical details and processing involved in their production. Written responses will be produced under open-book conditions.

Note — Evidence can be holistic or Outcome by Outcome

National Unit specification: support notes

Unit title: Monochrome Film Processing and Printing (SCQF level 6)

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 is an optional Unit within the National Certificate in Photography (SCQF level 6), but can also be taken as a freestanding Unit.

It may be an advantage for candidates to have some prior experience of photography, perhaps having achieved the Unit Introduction to Photography (SCQF level 5). The aim is for candidates to gain an understanding of how images are produced in monochrome materials, and to follow up that understanding by working with film and paper to produce correctly processed films and a variety of effective prints. They will learn about the basic structure of monochrome materials and both film and print processing and print enlargement techniques.

Candidates would benefit from having knowledge and/or skills in safe chemical handling, film camera operation and loading and print presentation. Familiarisation with all health and safety requirements of working in a darkroom environment is also very important.

This Unit could be integrated with Photography: Creative Image Making Techniques, Photography: Manipulative Processes, Studio Photography: An introduction, Photography: Portraiture Skills

This Unit should prepare candidates for progression to Photography: Darkroom Techniques DW81 34 (SCQF level 7)

Guidance on learning and teaching approaches for this Unit

Outcome 1

In Outcome 1 candidates would benefit from working individually or in small groups to research information on the basic structure of monochrome film and paper. This information could be underpinned by class lectures and tutor directed study during preparation for assessment via closed-book exercises.

Outcome 2

In Outcome 2 candidates would benefit from working practically as a class group and as individuals, undertaking the processes and procedures required for the correct processing of both monochrome film and prints. It is recommended that tutor demonstrations of all processes followed by candidates' own practical workshop experience should precede lectures, tutorials or classroom revision and assessment of theoretical elements.

National Unit specification: support notes (cont)

Unit title: Monochrome Film Processing and Printing (SCQF level 6)

Outcome 3

In Outcome 3 candidates would benefit from working initially in small groups, practising the procedures required in retrieving and loading exposed film for processing and in memorising the correct steps and solutions required in processing exposed film. It is recommended that the correct processing of exposed film should take place over a number of occasions. Candidates should process final negatives individually.

The correct shooting of monochrome film stock should be closely supervised by the tutor to maximise candidates' opportunity to succeed in producing both well processed and exposed negatives from which to print. The origination of film for processing could be integrated with a number of units within a full-time programme of study.

All current, relevant health and safety requirements should be covered and repeated throughout the delivery of this Outcome.

Outcome 4

In Outcome 4 candidates would benefit from class demonstrations of the use of features of the enlarger, masking frames, the effective use of print borders and final print presentation and print processing techniques using tray or machine developing. The use of test strip/prints and impact of correct viewing area lighting should all be demonstrated and discussed in class or small groups prior to workshop activities commencing.

Candidates undertaking practical workshop exercises should have ongoing access to tutor feedback and guidance. This should however be underpinned by knowledge delivered through class lectures, tutorials and demonstrations.

It is strongly recommended that all test strips and test prints and accompanying technical data are retained for comparison and comment. When undertaking burning and dodging the inclusion of a 'control print' for comparison should also be retained.

Candidates may benefit from working in pairs at the outset of workshop activities but should produce the required prints as individuals with as little input from colleagues or tutors as possible. It is recommended that several different negatives are used to test the candidates.

All current, relevant health and safety requirements should be covered and repeated throughout the delivery of this Outcome.

Guidance on approaches to assessment for this Unit

The following approaches to assessment are suggested:

Outcome 1 — Restricted response questions

Outcome 2 — Restricted response questions

Outcome 3 — Practical exercise and written evidence which could be in the form of a log book.

Outcome 4 — Practical exercise and written evidence which could be in the form of a log book.

National Unit specification: support notes (cont)

Unit title: Monochrome Film Processing and Printing (SCQF level 6)

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 a basic understanding of monochrome film and paper materials and undertake the processing of monochrome film and the printing/enlargement of monochrome negatives. This will allow candidates to develop skills not only in the use of monochrome materials but also in the control and understanding of image tone and contrast

This means that as candidates are undertaking this Unit they will be developing aspects of the Core Skills of:

Problem Solving — Candidates will be problem solving in a variety of ways throughout this unit, however the principal area will be within the printing processes and practice required in Outcome 4.

A degree of interpretation and decision making is required when producing a monochrome print and candidates will be required to apply a range of skills and techniques in a variety of circumstances.

Numeracy — Candidates will apply skills in numeracy both in the calculations required for the successful processing of monochrome materials and in the exposure times required when printing.

Communication — Candidates will develop communication skills through the requirement to explain the properties of monochrome materials and describe the processes involved in monochrome processing.

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

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