

**-SQA-SCOTTISH QUALIFICATIONS AUTHORITY**

**Hanover House  
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GLASGOW G2 7NQ**

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**NATIONAL CERTIFICATE MODULE DESCRIPTOR**

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<b>-Module Number-</b>	<b>8170061</b>	<b>-Session-</b>	<b>1991-92</b>
<b>-Superclass-</b>	<b>KE</b>		

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<b>-Title-</b>	<b>COLOUR PROCESSING</b>
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**-DESCRIPTION-**

Purpose	This module is designed for photography students. It aims to enable the student to acquire a working knowledge of colour film processing.
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It may usefully be taken as part of a full-time or part-time course in photography and may also be of interest to those already in employment in a processing laboratory.

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Preferred Entry Level	91844 Introduction to Photography 81851 Photography: Monochrome Film Processing and Printing.
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Outcomes	The student should: <ol style="list-style-type: none"><li>1. describe the construction of a colour negative film and a colour reversal film;</li><li>2. explain the essential stages in colour film processing;</li><li>3. describe the systems used to process colour film;</li><li>4. process a colour negative and a colour reversal film.</li></ol>
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Assessment Procedures	Acceptable performance in this module will be satisfactory achievement of all the Performance Criteria specified for each Outcome.
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The following abbreviations are used below:

PC	Performance Criteria
IA	Instrument of Assessment

**Note:** The Outcomes and PCs are mandatory and cannot be altered. The IA may be altered by arrangement with SQA. (Where a range of performance is indicated, this should be regarded as an extension of the PCs and is therefore mandatory.)

**OUTCOME 1                    DESCRIBE THE CONSTRUCTION OF A COLOUR NEGATIVE FILM AND A COLOUR REVERSAL FILM**

- PCs
- (a) The identification of the different layers in a colour film is correct and in accordance with the manufacturer's specifications.
  - (b) The explanation of the difference between substantive and non-substantive colour reversal films is correct with regard to film construction and processing.

IA    Structured Question

The student will be given a cross sectional diagram of a colour film to test his/her knowledge of colour negative and colour reversal films. The student will be required to annotate the diagram to identify the different layers and also to explain the difference between substantive and non-substantive colour reversal films.

Satisfactory achievement of the Outcome will be based on all Performance Criteria being met.

**OUTCOME 2                    EXPLAIN THE ESSENTIAL STAGES IN COLOUR FILM PROCESSING**

- PCs
- (a) The explanation of the effect of the first developer on the colour film is accurate with respect to the production of a negative image.
  - (b) The explanation of the effect of the colour developer on the colour film is accurate with respect to the production of colour coupling.
  - (c) The explanation of the effect of the bleach/fix bath on the colour film is accurate with respect to removing the silver image from the emulsion.

IA    Structured Question

The student will be given a diagrammatical representation of the various processing stages to test his/her knowledge of the stages involved. The student will be required to annotate the diagram to identify the changes occurring at each stage.

Satisfactory achievement of the Outcome will be based on all Performance Criteria being met.

**OUTCOME 3            DESCRIBE THE SYSTEMS USED TO PROCESS COLOUR FILM**

- (a) The identification of different types of colour processing system is correct.
- (b) The description of how the processing system operates is accurate in terms of the different processing equipment used.
- (c) The identification of the advantages and disadvantages of using the processing system is correct in terms of cost, time saving and required film throughput.

**IA     Structured Question**

The student will be presented with a structured question to test his/her knowledge of colour processing systems. The student may be given a photograph or diagram of different types of system: this should include eg. dip and dunk, roller transport, rotary discard, deep tank and small tank.

The student will be required to identify the systems, describe the operation of each system named and list the advantages and disadvantages.

Satisfactory achievement of the Outcome will be based on all Performance Criteria being met.

**OUTCOME 4            PROCESS A COLOUR NEGATIVE AND A COLOUR REVERSAL FILM**

PCs

- (a) The colour reversal film is processed correctly in accordance with the manufacturer's instructions.
- (b) The colour negative film is processed correctly in accordance with the manufacturer's instructions.

**IA     Assignment**

The student will be presented with an assignment to test his/her ability to process colour negative and colour reversal film. Working to a brief agreed between tutor and student, he/she will be required to process transparencies and negatives which may either be provided by the student him/herself or by the tutor.

Satisfactory achievement of the Outcome will be based on all Performance Criteria being met. This will be demonstrated by the student successfully processing the colour films.



**The following sections of the descriptor are offered as guidance.  
They are not mandatory.**

### CONTENT/CONTEXT

Control of Substances Hazardous to Health (COSHH) regulations should be strictly adhered to at all times.

Corresponding to Outcomes 1-4:

1. Colour dyes. Subtractive colour materials. Colour couplers, emulsion, colour masking. Amateur and professional emulsions. Film types.
  2. C41 (or equivalent). E6 (or equivalent). Time, temperature, agitation.  
  
Safety, chemical mixing, protective clothing, ventilation, contamination.
  - 3&4. Amateur processing - daylight tanks and processing kits.  
  
Professional processing.  
  
Deep tank hand line. Water or hot air jacket for temperature control. Gas agitation. Tank to tank agitation, oxidation.  
  
Replenishment.  
  
Rotary discard processing. Manual and automatic - one shot processing. Water jacket. Rotary agitation. Daylight processing.  
  
Automatic Roller Transport Processing. Automatic replenishment.  
  
Dip and Dunk processing - professional laboratory facility.
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### SUGGESTED LEARNING AND TEACHING APPROACHES

The student should follow an activity based learning approach, seeking guidance at each stage. Activities should be centred on assignments based on well defined briefs.

Each procedure should be explained, demonstrated and followed by supervised participation by the student.

Students should be encouraged to compare each other's work and to discuss different approaches and solutions to problems. This can be done on an informal basis, but tutor led discussions can be held at regular intervals. A formal evaluation meeting could act as a summing up of the teaching achieved in the module and could contribute to the effectiveness and acceptability of final assessments.

Terminology should be presented in context throughout the module.

Equipment, processes and procedures which cannot be experienced should be reinforced by films, videos, slides and, if possible, visits to commercial processing laboratories.

A coaching approach can be used. The tutor demonstrates techniques and the student practises them within the context of a brief. Tutor gives constant support and feedback, with intervention where appropriate and the pulling of groups together to discuss common problems. This is repeated until particular students reach criterion with regard to particular Outcomes. This can be recorded on a student profile sheet without the need for whole group assessment sessions. It should be remembered that student performance in assessment should be as realistic as possible with no prompting from the tutor. Some students reach this stage more quickly than others and they can be enlisted in the coaching process.

All negatives and transparencies should be retained by the student in a folio of work.

Exemplars should be available for the student to compare standards. Manufacturer's standard negatives may be made available for comparison purposes.

The student must be informed of the tasks which contribute to summative assessment. Any unsatisfactory aspects of performance should, if possible, be discussed with the student as and when they arise.

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