



Australian Government

Department of Education, Employment and Workplace Relations

CUVPHI08B Enhance, manipulate and output photoimages

Release: 1

CUVPHI08B Enhance, manipulate and output photoimages

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the skills and knowledge required to apply techniques to image enhancement, manipulation, output and post output processes. The manipulation and output processes employed are to enhance and resolve the concept for the image. This is a specialisation unit and refers to specific techniques used to output images in either an analogue or digital context. This work would usually be carried out with supervision.

Current photoimaging industry practice relies increasingly on digital imaging processes and this should be reflected in training and assessment of this unit. Analogue equipment and processes may be used to support this as appropriate to the specific context.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.

Application of the Unit

Not Applicable

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Prerequisite units

It is highly recommended this unit be assessed in conjunction with:

- CUVPHI01B Source and apply photoimaging industry knowledge
- CUVPHI02B Develop self for photoimaging industry
- CUVPHI03B Research and apply information on the traditions which inform photoimaging practice
- CUVPHI06B Plan and carry out image capture in response to a brief
- CUVPHI07B Process photoimages to work print/file stage
- CUFSAF01B Follow health safety and security procedures.

This unit may also be assessed in conjunction with:

- CUVCRS08B Document the work progress
- CUVDES04B Integrate colour and design theories in response to a brief
- CUVCRS14B Prepare, store and maintain finished work.

Employability Skills Information

Employability skills

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

- | | |
|---|--|
| 1 Retrieve work prints or digital files. | 1.1 <i>Clarify</i> and confirm concept for final image in consultation with relevant colleagues .
1.2 Identify and select work prints or files which are consistent with concept/brief. |
| 2 Plan image output. | 2.1 Identify and confirm qualities and characteristics of the work prints or files suitable for enhancement and manipulation consistent with concept/brief.
2.2 Resolve output strategies consistent with the purpose of the final image, including identification of constraints and requirement of specified image use (print or electronic). |
| 3 Prepare work environment for analogue or digital work. | 3.1 Select work environment which meets requirements for specific tasks.
3.2 Care for work environment so that it remains clean and safe during the production of work.
3.3 Safely set up relevant equipment and prepare materials for the work. |
| 4 Enhance and manipulate the image(s). | 4.1 Select techniques for image enhancement and manipulation consistent with the concept, testing processes and purpose of the work.
4.2 Select materials and equipment appropriate for the selected techniques and, for a digital context, consider screen based issues .
4.3 Safely apply selected techniques to enhance and manipulate the image(s) in order to resolve image(s) ready for output, which includes resolving output strategies . |
| 5 Output image(s). | 5.1 Select appropriate materials and/or equipment for output option .
5.2 Safely output image by digital or analogue means. |

ELEMENT**PERFORMANCE CRITERIA**

- 6 **Restore work environment, equipment and materials and ensure safe storage.**

- 6.1 Safely restore work area after use.
6.2 Minimise and clean up waste in accordance with safety requirements.
6.3 Clean and maintain equipment in accordance with manufacturer's instructions.
6.4 Store equipment in accordance with workplace procedures and ensure readiness for future use.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills:

- literacy skills sufficient to read and interpret technical data and labels
- numeracy skills sufficient to calculate/measure materials requirement and interpret technical data/charts/graphs.

Required knowledge:

- maintenance and organisation of the work environment
- detailed knowledge of the physical properties and capabilities of the equipment and materials used in photoimaging for image enhancement, manipulation and output
- the characteristics of different materials (e.g. chemicals) under different treatments and the potential of these characteristics to achieve different effects
- organisational and legislative occupational health and safety procedures in relation to photoimaging work
- environmental issues associated with the materials and equipment used in image enhancement, manipulation and output work, including the potential issues associated with new approaches
- elements and principles of design and how these may be used, adapted for image processing
- traditions which inform photoimaging practice and how these may be used to inform own practice
- copyright, moral rights and intellectual property issues and legislation associated with image enhancement, manipulation and output.

REQUIRED SKILLS AND KNOWLEDGE

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The following evidence is critical to the judgement of competence in this unit:

- output of image(s) which demonstrate the application of selected techniques and which are consistent with concept and purpose of the work.

Context of and specific resources for assessment

The assessment context must provide for:

- practical demonstration of skills using required equipment and materials and selected techniques for image manipulation and output for a range of images
- presence of time constraints that reflect industry practice and standards.

Method of assessment

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:

- direct observation of the candidate using selected techniques for image enhancement, manipulation and output
- evaluation of images produced by the candidate
- discussion and questioning about candidate's intention and work outcome
- written and verbal reports
- review of folios of evidence
- third party workplace reports of performance by the candidate.

EVIDENCE GUIDE

Assessment methods should closely reflect workplace demands (e.g. literacy) and the needs of particular groups (e.g. people with disabilities and people who may have literacy or numeracy difficulties such as speakers of languages other than English, remote communities and those with interrupted schooling).

Assessment of this unit requires access to materials, resources and equipment needed to safely output analogue or digital images.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Clarifying the concept may involve:

- evaluating the work prints/digital file images against the concept
- reassessing the qualities and characteristics of the work prints/digital file images
- reassessing the results of testing processes of enhancement and manipulation.

The ***concept*** may include references to:

- the subject matter or theme for the image, e.g. the body; identity; land and place; political and/or cultural issues.

The ***concept*** may include:

- ease of realisation
- exploration of the elements and principles of design
- personal affinity with the technique
- the relationship of the work to traditions of photographic practice.

The ***final image*** may be for:

- advertising
- medical/scientific report
- personal expression/art
- photo documentary
- political commentary
- promotion
- social commentary.

Relevant colleagues may

- client
- supervisor

RANGE STATEMENT

include:

- others working on the project.

Enhancement and manipulation techniques may include:

- adjusting levels and curves
- colour correction
- density and contrast adjustments
- digital tool box functions
- dodging and burning
- exploring different filters
- masking, multiple printing, multiple exposure
- using a range of print developers
- using liquid emulsions
- using photo relevant menu.

The ***work environment*** may mean:

- darkroom equipped with film developing requirements, appropriate lighting and plumbing
- digital context equipped with computer, scanner, printer or other output devices, safely installed and managed electrical cabling, storage for software.

Safely means in accordance with:

- Federal, State and Territory legislation, regulations and standards.

Equipment may include:

- computer
- discs, electronic storage devices including hard disk, CDs and DVDs
- imaging applications/software
- output devices
- relevant wet darkroom equipment
- scanner.

Manipulation ***techniques*** may involve:

- digital techniques using a range of imaging applications, including Adobe Photoshop and features utilised by the photoimaging industry such as:
 - batch processing
 - colour/contrast and density controls
 - conversion to colour files to black and white

RANGE STATEMENT

images

- filters
- image assembly from multiple originals
- layers and channel operations
- masking
- text
- unsharp masking
- wet darkroom techniques:
 - emulsion transfer, use of liquid emulsions
 - general and local toning and bleaching
 - high contrast techniques including bas relief and tone-line
 - image tone modification
 - masking, multiple exposure, multiple printing
 - sabattier effect/pseudo solarisation
 - selective contrast control
 - use of different print developers.

Materials may include:

- a range of film types for black and white, colour transparencies and colour negative imaging
- a range of light sensitive papers
- relevant chemicals for wet darkroom film and paper development
- storage folders, negative carriers.

Screen based issues may involve:

- aliasing
- ambient light
- colour calibration
- colour management
- colour space
- pixelation
- resolution
- screen size
- WYSIWYG.

RANGE STATEMENT

Output strategies may involve:

- inks/pigments
- metamerism
- paper surfaces and types
- type of printer
- viewing conditions of output.

Output ***equipment*** may include:

- analogue:
 - contact printers
 - enlargers
 - enlarging easel
 - timers
 - wet processing apparatus
- digital:
 - dye sublimation
 - emerging print technologies
 - inkjet (desktop and large format)
 - laser printers
 - LED and CRT printers
- other print technologies:
 - cyanotype
 - digigraphs and compugrams
 - gravure
 - photolithography
 - screen printing.

Output options may be:

- digital print
- file
- film (colour transparency)
- hybrid technology
- photographic print, e.g. black and white, colour
- Web.

Unit Sector(s)

Not Applicable