



Australian Government

Department of Education, Employment and Workplace Relations

CUVPHI503A Explore the descriptive and emotive nature of photo lighting

Release: 1

CUVPHI503A Explore the descriptive and emotive nature of photo lighting

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the performance outcomes, skills and knowledge required to produce creative and innovative photoimages using photo lighting principles.
No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.

Application of the Unit

Application of the unit

Every aspect of photoimaging practice is based on images created with and by light. Photoimaging practitioners are required to interpret lighting requirements for briefs as well as determine appropriate lighting requirements for a range of subjects (both in the studio and on location). The photoimaging practitioner is required to apply the special attributes of lighting to accurately describe or enhance a subject's appearance. In advanced areas of photoimaging practice, the emotive power of the image is created by lighting/light quality selection and control. This work is usually undertaken independently (with guidance where required).

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Prerequisite units

The following units or demonstrated equivalence are required prior to undertaking this unit:

- CUVPHI04A Apply photoimaging lighting techniques
- CUVPHI05A Use a 35mm SLR camera or digital equivalent
- CUVPHI06A Plan and carry out image capture in response to a brief.

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 Research light and its relationship to photoimaging. | <ul style="list-style-type: none">1.1 Identify and review historical and contemporary <i>lighting techniques and technology</i> for descriptive and emotive lighting.1.2 Identify and review contemporary <i>theories on the nature of light</i> for descriptive and emotive lighting.1.3 Identify and review <i>photoimaging lighting technologies</i> and their response to light.1.4 Evaluate currency/credibility of information gathered and ensure research scope is sufficiently broad.1.5 Prepare a shoot list for a range of lighting experiments and confirm lighting techniques and schema with <i>appropriate person/s</i>. |
| 2 Experiment with light and resolve lighting problems for complex subjects. | <ul style="list-style-type: none">2.1 Source and apply <i>shoot requirements</i> to identified range of lighting experiments.2.2 Explore interior and exterior subjects in <i>a range of locations</i> in the experimental process.2.3 Apply OHS processes and standards in the experimental process.2.4 Apply lighting techniques and technology in the experimental process.2.5 Review performance and adapt lighting techniques and technology in the experimental process. |
| 3 Apply descriptive and emotive lighting in a photoimaging context. | <ul style="list-style-type: none">3.1 Produce a series of photoimages using appropriate lighting techniques and technology.3.2 Evaluate the effectiveness of lighting techniques and technology in the production of photoimages.3.3 Wrap up process and reinstate equipment.3.4 Catalogue, store and maintain research reference material and work samples.3.5 Identify future opportunities, work directions, equipment needs and workflow changes resulting from application of photo lighting principles. |

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills:

- photoimaging skills sufficient to:
 - archive, maintain and manage film and digital assets
 - create/optimise files and film to photoimaging industry standards
 - implement OHS/quality control procedures as they apply to a range of lighting techniques and technology
- research skills sufficient to access and compare contemporary styles and conceptual/aesthetic approaches to lighting techniques and technology
- critical thinking skills sufficient to:
 - employ reflective questioning to analyse performance
 - recognise barriers to/innovative possibilities arising from lighting techniques and technology
- literacy skills sufficient to:
 - interpret business documents and contracts
 - obtain necessary permits and licences to operate ancillary equipment and work in special locations
- numeracy skills sufficient to determine mathematical problems arising from technical processes associated with lighting techniques and technology
- communication skills sufficient to:
 - explain and describe work practices and methods
 - negotiate with suppliers, models, creative teams and other stakeholders
- learning skills sufficient to:
 - learn the operation of ancillary equipment
 - review personal performance within shoot context
 - upgrade knowledge required to work in varied locations
- planning and organising skills sufficient to:
 - adhere to timelines within the experimental process
 - coordinate activities of models, assistants, creative and production teams
 - organise shoots on location/in studio and prepare shoot management timelines
- technology skills sufficient to check and reinstate equipment, studio and props.

Required knowledge:

REQUIRED SKILLS AND KNOWLEDGE

- OHS procedures/standards associated with lighting techniques and technology
- selection, testing and evaluation of lighting techniques and technology to ascertain suitability for innovative and creative production purposes
- traditions/contemporary issues that inform lighting techniques and technology.

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

Evidence of the following is essential:

- ability to research, identify, test and apply lighting techniques and technology
- ability to implement OHS/quality control procedures when applying lighting techniques and technology
- ability to review personal performance when applying lighting techniques and technology.

Context of and specific resources for assessment

Assessment must ensure:

- access to a range of locations and studios for photoimaging shoots
- access to a range of photoimaging production equipment (e.g. cameras, computers, software, printers, studios, lighting and accessories)
- access to sources of information on allied industries' lighting techniques and technology
- access to sources of information on lighting techniques and technology (e.g. magazines, newspapers, libraries, internet)
- opportunity for collaboration with or in allied industries (e.g. scientific, technical, film, television, theatre)
- access to appropriate learning and assessment support when required
- the use of culturally appropriate processes, and techniques appropriate to the oracy, language and literacy capacity of the assessee and the work being performed.

EVIDENCE GUIDE

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by candidate
- direct observation of candidate applying lighting techniques and technology, implementing OHS/quality control processes and meeting deadlines
- case studies to assess candidate's ability to evaluate lighting techniques and technology and their suitability to historical and contemporary contexts and themes
- problem solving activities to assess candidate's critical thinking skills.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- CUVPHI501A Research role and use of the photoimage in visual communication
- CUVPHI502A Research and exploit photoimaging trends
- CUVPHI504A Investigate and exploit innovative imaging options.

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.

Lighting techniques and technology may include:

- candles, matches and firelight
- car headlights/car light trails
- film, television and theatre
- fireworks and sparklers
- galleries and displays
- Kirlian imagery
- natural light, including:
 - lightning
 - sunlight/starlight
 - aurora
- photography/imaging lighting for studio/location
- Schlieren
- street lights
- supplementary/mixed lighting situations where images are made by ambient and supplemental illumination to:
 - create colour effects
 - enhance the colour depth of the subject
 - emphasise parts of the subject
 - balance the contrast that may be apparent from the principal illumination
- torches and spotlights
- ultrasound
- ultraviolet and infrared sources
- x-rays, gamma rays.

Theories on the nature of light may include:

- human vision
- the nature of light, including:
 - colour temperature

RANGE STATEMENT

- electromagnetic spectrum
- natural light phenomena
- reflection and absorbance
- terms used to define light quality and direction
- the inverse square law.

RANGE STATEMENT

Photoimaging lighting technologies may include:

- digital sensors
- dynamic range of input (capture) device and tonal clipping of output (printing) device
- exposure determination methods and devices:
 - digital histograms
 - dynamic range
 - lighting ratios
- film emulsions
- merge to HDR
- meter types:
 - colour temperature
 - flash meter
 - hand-held
 - in-camera
 - spot
- metering methods:
 - colour and resolution targets
 - evaluative
 - grey cards
 - incident
 - off-the-film
 - reflective
- metering modes:
 - centre-weighted averaging
 - matrix
 - spot
- natural/ambient light:
 - afterglow
 - corpuscular rays (God beams and columns)
 - mercury and sodium vapour lights
 - mist and fog
 - moonlight
 - rain and storm
 - rainbows
 - smoke and haze
 - sunlight
 - sunrise and sunset

RANGE STATEMENT

- reciprocity failure
- scan backs
- shooting in RAW
- studio and location lighting technology:
 - combined ambient and flash
 - electronic flash
 - high-speed flash
 - multi-flash and strobe
 - painting with light
 - southlight/northlight opening for natural light
 - tungsten and photoflood
 - use of gels to colour light sources
 - use of transparent and translucent surfaces to place subjects on for shadowless effects
- tungsten, incandescent and fluorescent
- zone system.

Appropriate persons may include:

- members of relevant professional associations
- mentors/peers
- practising photographers, photoimagists or members of allied fields.

Shoot requirements may include:

- hiring lighting and ancillary equipment
- locating specialist lighting technical experts
- obtaining legal access to locations (e.g. permits, site licences) and/or specialist lighting technology
- upgrading skills to operate specialist lighting technology and/or work in hazardous locations.

A range of locations may include:

- agricultural/rural
- commercial/industrial
- indoors
- natural landscape
- studio
- underwater
- urban.

Unit Sector(s)

Not Applicable

Competency field

Competency field Design and Visual Communication - Photoimaging