



Australian Government

Department of Education, Employment and Workplace Relations

CUVPHI403A Apply photo imaging lighting techniques

Release: 1

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Modification History

Version	Comments
CUVPHI403A	This version first released with <i>CUV11 Visual Arts, Craft and Design Training Package version 1.0</i>

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to select and apply lighting to a range of subjects in different work spaces.

Testing and tagging of electrical equipment must be carried out by a person with the relevant certificate of competency according to the performance specifications of Australian Standard 3760: 2000 In-service safety inspection and testing of electrical equipment and Australian Standard 3002: 1985 Electrical installations – shows and carnivals.

Application of the Unit

Photographers apply the skills and knowledge described in this unit. On large photo shoots, this role could be assigned to a photographer's assistant. Photo shoots could be for the fashion industry, marketing and promotional activities, live entertainment events, as well as for film and television productions. Artists who use photography as a medium also apply these skills and knowledge.

At this level, work may be independent or supervised depending on the work context.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Element

Elements describe the essential outcomes of a unit of competency.

Performance Criteria

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

1. Set up lighting for photo shoot	<p>1.1. Confirm lighting characteristics required for <i>subjects</i> in consultation with <i>relevant personnel</i> as required</p> <p>1.2. Select <i>lighting equipment and accessories</i> that best fit the purpose of images</p> <p>1.3. Determine <i>work environment needs</i></p> <p>1.4. Select appropriate <i>camera system and accessories</i></p> <p>1.5. Correctly assemble camera and lighting systems according to work requirements</p> <p>1.6. Undertake work with due regard to <i>safety considerations</i></p> <p>1.7. Use equipment and <i>materials</i> in a manner that minimises waste</p>
2. Light subjects	<p>2.1. Position models and props as required</p> <p>2.2. Test lighting <i>techniques</i> to determine their fitness for purpose</p> <p>2.3. <i>Adjust</i>, modify and calibrate camera settings to meet lighting requirements</p> <p>2.4. Work collaboratively with others when required to meet timelines associated with photo shoots</p>
3. Complete and review shoot	<p>3.1. Capture images using appropriate camera features</p> <p>3.2. Review images against work requirements and adjust lighting as required</p> <p>3.3. Document work process as required</p>
4. Complete post-shoot activities	<p>4.1. Safely clean and restore work environment to its original state</p> <p>4.2. Clean and maintain equipment according to manufacturer instructions</p> <p>4.3. Report damage to equipment according to organisational procedures</p> <p>4.4. Safely transport and store equipment and materials and ensure readiness for future use</p>

Required Skills and Knowledge

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

Required skills

- literacy skills to interpret written instructions, safety labels and procedures
- numeracy skills to interpret technical charts and diagrams about lighting
- planning and organising skills to assemble and test lighting equipment in a logical sequence
- self-management skills to comply with OHS requirements and work to project parameters
- technical skills to:
 - assemble and disassemble lighting equipment for photo shoots
 - use different types of light-measuring devices.

Required knowledge

- electromagnetic spectrum as it impacts on photo imaging practice
- colour temperature and colour synthesis in photo imaging practice
- ways in which light-sensitive materials, including films and digital sensors, respond to light
- effect of light on exposure of light-sensitive media
- physical properties and capabilities of camera systems and lighting equipment used in the exposure of photographic film and digital sensors
- elements and principles of design and their application to photographic lighting
- theoretical and historical contexts of lighting for photo imaging and a range of other art forms
- work, ideas and techniques of other photographers, especially with regard to lighting
- issues and challenges that arise in the context of lighting photo shoots
- sustainability considerations for photo imaging practice
- OHS issues and procedures associated with lighting.

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.

Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>Evidence of the ability to:</p> <ul style="list-style-type: none"> select appropriate camera and lighting equipment and accessories for range of different subjects in different physical environments apply appropriate lighting techniques to a range of different subjects in different physical environments.
Context of and specific resources for assessment	<p>Assessment must ensure access to:</p> <ul style="list-style-type: none"> materials, resources and equipment needed to select, set up, adjust and apply camera and lighting systems.
Method of assessment	<p>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</p> <ul style="list-style-type: none"> direct observation of the candidate setting up lighting equipment for a photo shoot and applying lighting techniques evaluation of lighting in images where the candidate was responsible for lighting review of case studies to assess knowledge of how to apply lighting techniques in a range of situations written or oral questioning to test knowledge as listed in the required knowledge section of this unit review of portfolios of evidence review of third-party reports from experienced practitioners. <p>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).</p>
Guidance information for assessment	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:</p> <ul style="list-style-type: none"> CUVPHI401A Capture images in response to a brief.

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.

<p><i>Subjects</i> may include people or objects photographed for purposes, such as:</p>	<ul style="list-style-type: none"> • photo-documentary: <ul style="list-style-type: none"> • the built environment • the natural environment • portraiture: <ul style="list-style-type: none"> • formal • candid • scientific • medical • technical • still life.
<p><i>Relevant personnel</i> may include:</p>	<ul style="list-style-type: none"> • supervisor • manager • client • art director • designer: <ul style="list-style-type: none"> • set designer • costume designer • production designer • director • production manager • make-up and hair personnel • model.
<p><i>Lighting equipment and accessories</i> may include:</p>	<ul style="list-style-type: none"> • fibre optics • floor pack electronic flash systems • French flags and gobos • light-modifying devices: <ul style="list-style-type: none"> • scrims • umbrellas • honeycombs and grids • soft boxes • reflectors • light absorbers • portable (monobloc type) systems

	<ul style="list-style-type: none"> • portable electronic flash • portable photoflood and tungsten light systems • exposure: <ul style="list-style-type: none"> • grey card readings • incident/reflective readings • lighting ratio and brightness range readings • off the film (OTF) and through the lens (TTL) plane metering • spot meter readings • light-sensitive materials: <ul style="list-style-type: none"> • different types of film and electronic sensors • response of light-sensitive material to different colours of light source • light sources: <ul style="list-style-type: none"> • candle flame and other ambient low light sources • fluorescent lighting • incandescent, tungsten and photoflood • metallogenic and discharge lamps • ultraviolet and infra-red.
<p><i>Work environment needs</i> may include:</p>	<ul style="list-style-type: none"> • chairs • stools • posing equipment and tables • dust free environment • electricity • lighting: <ul style="list-style-type: none"> • natural/available • studio • portable equipment and materials: <ul style="list-style-type: none"> • ground sheets • backgrounds • portable generator • ventilation and air conditioning • work tables • storage areas and facilities.
<p><i>Camera systems and accessories</i> may include:</p>	<ul style="list-style-type: none"> • 120 camera • 4 x 5 camera • 35mm SLR camera • cable release • digital cameras and backs • exposure meters

	<ul style="list-style-type: none"> • film and media • filters • range of lenses • tripods • batteries • camera stands.
Safety considerations include:	<ul style="list-style-type: none"> • complying with federal, state and territory legislation, regulations and standards • checking that electrical equipment is correctly tagged and tested • ensuring that the work space is free of trip hazards.
Materials may include:	<ul style="list-style-type: none"> • gaffer tape • ground sheets • power cables • multi-outlet power boards for electrical equipment • props • transport cases • equipment bags.
Techniques may include:	<ul style="list-style-type: none"> • field of view • framing • dynamic range • composition • background effects • colour balancing and the use of colour temperature meters and filters • combined lighting and the illusion of movement • feathering the light • lighting for silverware • lighting for textured surfaces • lighting glassware and gloss ware • lighting techniques for translucent surfaces • painting with light • shadowless lighting • synchro sun and fill flash • white balance and custom colour optimisation for electronic sensors • techniques for special situations: <ul style="list-style-type: none"> • scientific • technical • forensic.
Ways to adjust camera settings for lighting may	<ul style="list-style-type: none"> • aperture • exposure

involve:	<ul style="list-style-type: none">• lens focal length• lens hoods• shutter speed.
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Unit Sector(s)

Visual communication – photo imaging