



Australian Government

Department of Education, Employment and Workplace Relations

CUVPHI526A Produce technical photo images

Release: 1

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Modification History

Version	Comments
CUVPHI526A	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 produce technical photo images for institutional clients.

Application of the Unit

This unit applies to the production of technical photo imaging products by forensic, medical, scientific (including mining and environmental field officers) and museum/library photographers.

A normal technical workflow can require liaison with clients, subjects, marketing officers, creative/production teams, medical staff, scientific or technical staff, museum or gallery staff, police and forensic personnel, field officers, suppliers, contractors, employees and project stakeholders. Forensic, medical and scientific photographers may work independently or as part of a team but within an institutional structure as a team member.

This unit requires the application of skills and knowledge in order to respond to work requests, prepare quotes, plan and prepare shoots, process and optimise images, supply images to clients, bill clients and liaise, consult and negotiate with a range of associated and allied persons, work teams, government agencies and private enterprises.

Licensing/Regulatory Information

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

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Element	Performance Criteria
<i>Elements describe the essential outcomes of a unit of competency.</i>	<i>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.</i>

Elements and Performance Criteria

1. Receive and interpret job request requirements	1.1 Evaluate requirements of job requests for a range of technical photo imaging projects and confirm with appropriate people 1.2 Research and adopt professional practice arrangements, management procedures and workflow requirements for a range of technical photo imaging projects 1.3 Prepare appropriate budget, and quote and contract for shoot
2. Prepare for shoot	2.1 Consider and apply special considerations for shoot 2.2 Investigate and adopt site-specific OHS, consents, and licence and permit requirements 2.3 Negotiate with necessary parties for access to and needs of shoot locations and subjects 2.4 Confirm technical requirements, shoot requirements and shoot responsibilities with appropriate people 2.5 Prepare shoot management timelines and make appropriate shoot preparations
3. Shoot images and optimise to client, brief and post-production specifications	3.1 Capture in-production images to the agreed style and content within shoot context 3.2 Work with production team and observe subject/client for feedback on shoot progress 3.3 Optimise images and output image product to agreed specifications using industry standards 3.4 Pack work for electronic or physical dispatch and deliver to agreed location by appropriate methods and within agreed timeframe 3.5 Conclude and maintain management procedures
4. Wrap up and review shoot	4.1 Check and reinstate equipment 4.2 Review response from clients and subjects 4.3 Review personal performance within shoot context 4.4 Identify future opportunities, work directions, equipment needs and workflow changes resulting from the shoot

Required Skills and Knowledge

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

Required skills

- photo imaging skills to:
 - archive, maintain and manage film and digital assets
 - create meaningful images in private and public spaces in a respectful manner
 - create and optimise file/film to technical photo imaging industry standards
- research skills to:
 - access information on all aspects associated with technical shoots
 - compare against existing quality assurance (QA) and quality management (QM) procedures and best practice
 - compare contemporary styles and conceptual or aesthetic approaches to technical photo imaging
 - maintain professional practice arrangements for technical photo imaging
- critical thinking skills to:
 - recognise and address barriers to effective photo imaging workflow
 - reflect on and analyse own performance
- literacy skills to:
 - develop and interpret business documents and contracts
 - interpret QA and QM policy documentation
- numeracy skills to:
 - maintain contractual and financial records for business and taxation purposes
 - prepare budgets, quotations and invoices for clients
- communication skills to:
 - engage with patients and medical professionals in a meaningful and respectful way
 - explain and describe work practices and methods
 - liaise and negotiate with clients, subjects, marketing officers, creative/production teams, medical staff, scientific and technical staff, museum and gallery staff, police and forensic personnel, field officers, suppliers, contractors, employees and project stakeholders
- obtain necessary permits and licences to operate equipment and work in special locations
- learning skills to:
 - learn the operation of equipment
 - review performance against QA and QM processes
 - review personal performance within shoot context
 - upgrade knowledge required to work in varied locations of technical imaging
- planning and organising skills to:
 - conduct an audit of QA and QM procedures
 - interpret and respond to photo imaging briefs
 - coordinate activities of models, assistants and production teams
 - organise shoots on location or in studio and prepare shoot management timelines
- teamwork skills to:

- deal empathetically with subjects in a variety of environments, including ones of a highly charged emotional and stressful nature
- establish and nourish industry links with suppliers, contractors and employees
- negotiate prices and fair exchange of services
- recognise and overcome tension and nervousness in subjects
- relate to the public and work team
- resolve complaints and disputes
- work effectively with diversity
- technology skills to check and reinstate equipment, studio and props.

Required knowledge

- business practice, including partnerships, contracts, intellectual property, copyright, legal, moral, insurance, financial, budget, political, OHS, licences and permits
- forensic, medical, museum and scientific photo imaging environment, including practices and products
- QA and QM systems and audits
- relationship between practitioner and professional bodies and associations
- procedures for selecting, testing and evaluating technology to determine its suitability for technical production purposes
- traditions and contemporary issues that inform technical photo imaging practice
- working with government institutions and regulations relating to technical photo imaging practice.

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	Evidence of the ability to: • apply a typical workflow in technical photo imaging professional practice • apply business, coordination and negotiation skills to own photo imaging work practices • apply technical and imaging skills, including capturing and optimising technical images • interact and liaise with clients, subjects, suppliers, contractors, employees, models, assistants, production teams, project stakeholders and associated professionals • attain the required skills and permits critical to the performance of activities in specialised locations, such as: • diving certificates • mountaineering skills • mining site permits and licences • apply knowledge of special communication needs, confidentiality and cultural diversity requirements within the technical photo imaging environment. When assessing in a scientific context, evidence of competency against the following unit is also required: • MSL974008A Capture and manage scientific images. When assessing in a medical context, evidence of competency against the following units is also required: • BSBMED301B Interpret and apply medical terminology appropriately • HLTIN301A Comply with infection control policies and procedures in health work. When assessing in a museum/library context, evidence of competency against the following unit is also required: • CULMS205C Observe and report basic condition of collection.
Context of and specific resources for	Assessment must ensure: • access to:

assessment	• a range of photo imaging production equipment, such as cameras, computers, software, printers, darkrooms, lighting and accessories • a range of locations and studios for technical photo imaging shoots • sources of information to research contemporary styles and conceptual or aesthetic approaches to technical photo imaging • appropriate learning and assessment support when required • opportunity for collaboration with or in allied industries, such as marketing officers; graphic or web designers; commercial printers; medical, pathology, nursing or allied health staff; scientific or technical staff and police • the use of culturally appropriate processes, and techniques appropriate to the oracy, language and literacy capacity of the candidate and the work being performed.
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 • review of third-party reports from experienced practitioners • direct observation of candidate applying a typical workflow in technical photo imaging professional practice • case studies to assess candidate's ability to research contemporary styles and conceptual or aesthetic approaches to technical photo imaging • participation observation in professional technical or illustrative photo imaging awards • review of technical image products against industry standards and brief specifications. 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).
Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example: • CUVPHI523A Produce media photo images • CUVPHI527A Make illustrative images for publication

	and display • CUVPHI529A Employ colour management in a digital imaging workplace.
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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.

Technical photo imaging projects may include:	• astronomical phenomena • aerial • biological (on site or in the field): • animal • botanical • freshwater • marine • microscopic and macroscopic • natural phenomena • terrestrial • buildings and construction sites • copy work • cultural, anthropology and archaeology (on site or in the field): • artefacts • human history object and subjects • site documentation • geological and mining (on site or in the field): • landform and vegetation documentation • metallurgy and crystallography • mine sites and equipment • medical (on site or in the field): • clinical and patients • dental • ophthalmology • pathology • pre-surgical and surgical • police and forensic (on site or in the field): • accident sites • coronial • crime scene documentation • evidence • product and equipment.
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<i>Appropriate people</i> may include:	• members of relevant professional associations • mentors, peers and team members • practising institutional photographers, photo imagists and members of allied fields.
<i>Professional practice arrangements</i> may include:	• contracts • copyright, licensing and intellectual property rights • financial management • image archive/digital asset management • image transportation and storage • institutional workplaces • insurance, including personal, public risk, accident and sickness, and equipment • licences and permits • model and property releases • OHS • project budget management.
<i>Management procedures</i> may include:	• clinical governance: • confidentiality • image storage, archiving and data protection • informed and voluntary patient consent • institutional and public legal systems for photo imaging access to locations and subjects • institutional internal financial systems • institutional management systems • internal job requests, numbering and logging systems • patient admission procedures, including patient consent forms.
<i>Workflow requirements</i> may include:	• liaising with other professionals • professional development requirements for shoot • sourcing specialised equipment • sourcing technical information for shoot • sourcing time schedules, such as operation lists.
<i>Special considerations</i> may include:	• confidential, privacy or secrecy issues for shoot and subjects • dealing with stressful situations, such as emergency departments, mortuaries and operating theatres • knowledge of shoot context and subjects for safety or health issues • personal protective equipment (PPE) • recognising and overcoming tension and nervousness in subjects • special needs of subject or patient.

Technical requirements may include:	• colour management systems • dynamic range of input (capture) device and tonal clipping of output (printing) device • props, stands and backdrops • special lighting requirements (e.g. fibre optics, infra-red, ultraviolet, dental lighting systems) • special requirements of location • specialised capture or scanning devices (e.g. microscope backs, electron microscopes, reflective and transmissive scanners) • technical equipment required by shoot context.
Shoot requirements may include:	• analog or digital capture technologies and supporting accessories • food and accommodation • hire options for equipment • models, props and backgrounds • photo imaging lighting: • ambient • mixed lighting • supplementary, including electronic flash, tungsten and fluorescent • processing requirements for image work created • studio or location, including: • internal or external • aquatic • aerial • technical imaging product: • how it is to be used • what the client specifies • timelines for stages of the workflow • transportation of team and equipment.
Shoot responsibilities may include:	• confirm legal aspects of the shoot, such as copyright, licensing and intellectual property rights • control the environment and shoot context, such as: • surgical team for operative context • police professionals in a forensic or evidential context • scientist in an experimental illustration context • control the image product • control the shoot • internal billing • negotiate and sign contract

	• select locations, props and backgrounds • sign off on product.
Shoot preparations may include:	• assemble and check all equipment • brief assistants and other members of team • conceptualise involvement in creative process • confirm time, place and requirements for all aspects of the shoot that will be supplied by others • undertake weather check for location shoots.
Shoot context may include:	• astronomical • library, art gallery or museum • medical or hospital, on location or in laboratory or studio • mining (locations and laboratory) • police or forensic location or laboratory • public spaces and institutional administration spaces • research or scientific location, laboratory or studio.
Production team may include:	• administration representatives • assistants: • camera equipment • digital systems • audiovisual (AV) and telehealth representatives • commercial printers • design/construction specialists of customised shoot equipment • graphic designers • imaging product specialists, including audio, film and television • location specialists • marketing and promotion specialists • medical specialists and technical teams • post-production coordinators • reprographics specialists • scientific and educational professionals • scientists and technicians • specialists for field activities, including divers, mountaineers, boating/shipping specialists, pilots, machine operators, mapping specialists and rangers • surgical teams.
Optimise image may include:	• maintain quality and integrity of the digital data • optimise, retouch, enhance and photomontage as requested and where appropriate • output to natural scale (e.g. for court exhibit boards) • process JPEG, RAW and DNG files

	• use appropriate: • bit depth • colour space • file dimensions/size in pixels • file format, such as: • joint photographic experts group (JPEG) • portable document format (PDF) • Photoshop Data (PSD) • tagged image file format (TIFF) • uncompressed and compressed files.
Image product may include:	• archive and use appropriate digital asset management protocols and procedures • black and white prints to a specified format • colour film transparencies to a specified format • digital files as specified: • digital asset management • file naming, metadata, captions and inclusion of file information/data • transfer media, such as CD, DVD and internet • prints to specified size, mounting and finish.

Unit Sector(s)

Visual communication – photo imaging