



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **ICPPR284A Introduction to colour management**

**Revision Number: 1**

## ICPPR284A Introduction to colour management

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit describes the performance outcomes, skills and knowledge required to identify and apply the fundamental theory of colour in the printing industry. This includes terminology, colour modes and the analysis of light and colour.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit applies to the basic use of colour when creating layouts for individuals working in the printing and graphic arts sector.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## 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.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify the need for colour management	<p>1.1.The varied colour representation of <b><i>devices</i></b> are identified and recorded</p> <p>1.2.Colour inconstancies between input, display and output devices and the final printed product are identified and rectified</p> <p>1.3.The <b><i>components</i></b> of a colour management system are identified and suggestions made to improve <b><i>workplace practices</i></b></p>
2. Use colour modes and libraries	<p>2.1.Varying <b><i>colour modes and libraries</i></b> are used according to job specifications</p> <p>2.2.Images are converted between colour modes using a <b><i>process</i></b> to ensure the best reproduction according to job specifications</p> <p>2.3.Colour libraries are selected and used within software applications according to job specifications</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

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

#### Required skills

- occupational health and safety (OHS) in relation to using correct ergonomics when operating the computer
- communicating ideas and information, having considered all the fundamentals of colour theory
- collecting, analysing and organising skills in relation to the fundamentals of colour theory
- planning and organising skills for identifying and clarifying colour requirements
- teamwork skills for maintaining the production process in association with others
- problem-solving skills for diagnosing and correcting colour problems
- technical skills for using software and hardware correctly to ensure consistency of output

#### Required knowledge

- components of a colour management system
- terminology associated with colour management
- standard lighting conditions for matching colour
- effects different lighting conditions have on monitors, proofing and printing
- measurement of light intensity and colour temperature
- difference between red, blue, green (RGB), cyan, magenta, yellow, black (CMYK) and LAB colour
- different rendering intents and their application
- under colour removal (UCR) and grey component replacement (GCR) and what effect they have on an image
- different Pantone libraries and their application
- OHS issues needed to be considered when managing colour for digital production

## 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.

#### Overview of assessment

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

Evidence of the ability to:

- identify the need and components of a colour management system
- select and convert images to appropriate colour modes
- select colour libraries that comply with specific job specifications
- locate and use information relevant to the task from a variety of information sources.

#### Context of and specific resources for assessment

Assessment must ensure:

- that conditions are typical ambient conditions found in the workplace
- access to relevant facilities, equipment and materials used for colour management production
- use of culturally appropriate processes and techniques appropriate to the language and literacy capacity of learners 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
- third party workplace reports of on-the-job performance by the candidate
- practical demonstration by the candidate when converting images between colour modes.

#### Guidance information for assessment

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

- digital production or pre-press units that require the application of colour.

For valid and reliable assessment of this unit, evidence

**EVIDENCE GUIDE**

should be gathered over a period of time through a range of methods for assessment to indicate consistent performance.

## 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.

<b><i>Devices</i></b> may include:	<ul style="list-style-type: none"> <li>• monitors</li> <li>• proofers</li> <li>• printers</li> <li>• scanners</li> <li>• digital cameras</li> <li>• digital presses</li> <li>• printing presses.</li> </ul>
<b><i>Components</i></b> may include:	<ul style="list-style-type: none"> <li>• standardised viewing environment</li> <li>• calibrated and profiled output devices, such as printers and presses</li> <li>• calibrated and profiled input devices, such as scanners and cameras</li> <li>• calibrated monitors</li> <li>• software applications that support colour management</li> <li>• colour profiles.</li> </ul>
<b><i>Workplace practices</i></b> may include	<ul style="list-style-type: none"> <li>• establishment of colour managed workflow</li> <li>• calibration and regular recalibration of devices</li> <li>• adoption of recognised colour standard, such as AS ISO 12647-2.</li> </ul>
<b><i>Colour modes and libraries</i></b> may include:	<ul style="list-style-type: none"> <li>• RGB</li> <li>• CMYK</li> <li>• LAB</li> <li>• Pantone.</li> </ul>
<b><i>Process</i></b> may include:	<ul style="list-style-type: none"> <li>• selection of colour mode and rendering intent</li> <li>• converting using profiles.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	
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## Competency field

Competency field	Printing
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## Co-requisite units

Co-requisite units		