

Pixel-Based Image Manipulation

Unit Reference	L/601/3542
Level	3
Credit Value	8
Guided Learning Hours	60
Unit Summary	This unit is aimed at learners who wish to gain skills and knowledge in the use of industry standard software for the pixel-based manipulation of digital imagery. Learners will be able to make use of commonly used software tools and functions and apply them to typical image manipulation tasks, such as colour correction, image-retouching and enhancement
Learning Outcomes (1 to 4) <i>The learner will</i>	Assessment Criteria (1.1 to 4.2) <i>The learner can</i>
1. Recognise the use of pixel based image software	1.1 Assess how and where pixel-based image software is employed with the use of at least six examples
2. Be able to explore the tools and functions of pixel-based image manipulation software	2.1 Manipulate at least six imported images using the following <ul style="list-style-type: none"> • layers • filters • repair tools • colour adjustment • colour management • cropping 2.2 Construct at least four images from component

	<p>source material experimenting with a combination of at least four of the following in each</p> <ul style="list-style-type: none"> • selection tools • layers • lasso tools • pen tools • eraser • brush tools • clone tool • colour <p>2.3 Evaluate the outcomes from 2.1 and 2.2 in terms of technical and aesthetic qualities</p>
<p>3. Be able to initiate and create images in pixel-based image manipulation software for intended output</p>	<p>3.1 Formulate an intention for a final outcome</p> <p>3.2 Assess image requirements for intended output in terms of</p> <ul style="list-style-type: none"> • resolution • colour mode • output size • file format <p>3.3 Select appropriate image settings to create intended final outcome</p> <p>3.4 Select and use pixel-based image software tools to create an intended final outcome</p> <p>3.5 Review final outcome in terms of its technical and aesthetic qualities</p>
<p>4. Be able to manage and store digital imagery</p>	<p>4.1 Create a digital filing system for source and final imagery in appropriate file locations</p> <p>4.2 Save digital files in appropriate formats for print and screen-based outputs</p>
<p>Mapping to National Occupational Standards Photo Imaging Skillset 2007 PI-17 K&U: f, g, h, I, j, k. PS: 1, 3, 4, 6</p>	

PI-24 K&U: d, f, g, j, l. PS: 1, 7, 12

PI-26 K&U: eg PS: 2, 4, 5

Supporting Unit Information

L/601/3542 Pixel-based image manipulation - Level 3

Indicative Content

This unit is designed to provide learners with the skills and knowledge required to manipulate images in pixel based image manipulation software.

Learning Outcome 1. Recognise the use of pixel based image software

Learners should be introduced to the principles of pixel based image manipulation software and its' uses. Learners should be made aware of the scope and wide spread usage of pixel-based image manipulation through the investigation of examples.

Learning Outcome 2. Be able to explore the tools and functions of pixel-based image manipulation software

Learners should be introduced to industry standard software packages. They will use the pixel-based image manipulation software to experiment with the digital manipulation of images exploring the use of a wide range of available software tools. Once learners have gained an understanding of the basic tools they will be able to construct images from component source images, which may be generated by the student or gained from another source. To construct the images, learners will have to demonstrate the application of integral pixel-based image manipulation software tools and functions as listed in assessment criteria 2.2. Learner should reflect upon the outcomes of assessment 2.1 and 2.2, in terms of their technical and aesthetic qualities.

Learning Outcome 3. Be able to initiate and create images in pixel-based image manipulation software for intended output

Learners will have to decide upon a final intended piece to be produced using pixel-based image manipulation software. Using the knowledge gained they will need to determine the technical requirements of the final intended piece, including correct resolution for output (screen – 72dpi, Print 300+dpi), method, correct colour space (CMYK, RGB, Monotone, Duotone, etc) and file format. Learners will create their intended final piece in line with the identified technical requirements, and review the success of the intended outcome in terms of aesthetic and technical qualities.

Learning Outcome 4. Be able to manage and store digital imagery

For learners to work efficiently using image manipulation software they should create a digital filing system, using appropriate folder names and file tags for their source imagery and development files. They should be aware of the range of methods and hardware that can be used to achieve this, such as; External Hard drive, Pen Drive, Disk, RAID, etc.

Learners will need to know about suitable file formats and colour spaces (RGB, CMYK, Monotone, Duotone, Hexadecimal, etc), and save their work in an appropriate formats for both screen and print based outputs

Teaching Strategies And Learning Activities

This unit is intended to provide learners with the specific and technical skills required to use pixel-based image manipulation software successfully, therefore access to the appropriately equipped facilities is essential.

There are no restrictions upon the teaching and learning strategies that can be used for this unit. This unit may be taught in a variety of professional contexts and for the many differing purposes that pixel-based image manipulation software may be used.

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place.

Methods Of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

Evidence Of Achievement

Evidence may be presented in a range of formats that may include any number of the following

- Portfolio of selected images
- Reflective journal
- Sketchbooks/Workbooks

- Written evidence
- Annotated Worksheets
- Annotated design sheets
- Web based presentation
- Multi media presentation
- Sequenced images
- blogs
- Witness statements/observation records
- Records of tutorials/one-to-one discussions
- Worksheets/gapped handouts

These examples are for illustrative purposes and are not intended to be exhaustive or prescriptive.

However the evidence is presented, there must be confirmation of achievement of every learning outcome and criteria for assessment within the unit which must be clearly signposted.

Additional Information

Centres offering this unit should ensure that learners have access to sufficient equipment, as detailed in the indicative content, for each learner to use. Where there is an expectation that learners will need to provide resources in order to achieve the unit, centres should ensure this is made clear to learners at the point of recruitment.