

Unit 37: Graphic Media, Techniques and Technology

Unit code:	Y/502/5750
QCF Level 3:	BTEC National
Credit value:	10
Guided learning hours:	60

● Aim and purpose

The aim of this unit is to enable learners to develop knowledge and skills in the different ways graphic media is used in the creative industry. Learners will be investigating and experimenting with a variety of techniques and technologies and using them to produce their own graphic outcome.

● Unit introduction

Graphic designers need to understand and use a wide variety of media, techniques and technologies in order to develop ideas and produce finished work for graphics applications. They need to be skilled in the use of traditional and digital media to develop drawings, paintings or mixed media work for illustrations, advertisements and posters. Much contemporary graphic design features this multi-layering of a variety of media using hand crafted, digital and lens-based equipment and processes.

Practical investigations should form the basis of this unit, with learners investigating different media techniques and developing their own work. Learners experiments and investigations should be recorded, so their process and development is clear. To make this experimentation more effective, learners will explore primary and secondary source material, following specified themes. Primary sources could include a gallery visit or a field trip, drawings, sketches, colour studies and photographs. Learners could then take this material to the studio to develop ideas further. In this unit learners will also look at the way in which artists and designers, in a historical and contemporary context, have used the graphic media to inspire or create their own work.

It is advisable that this unit be delivered very early on in a programme and perhaps continue for as much as two thirds of the first year as a 'long thin' unit. The knowledge learners will gain from using and becoming skilled in the various media techniques will help them to develop ideas for final outcomes later in the programme.

● Learning outcomes

On completion of this unit a learner should:

- 1 Know about graphic media, techniques and technology
- 2 Be able to use graphic media, techniques and technology within own design work
- 3 Be able to present design outcomes using graphic media, techniques and technology.

Unit content

1 Know about graphic media, techniques and technology

Investigate: experiment; drawing eg observational, mark making drawings, graphic media; physical properties eg characteristics, effects, uses, limitations, creative potential

Media: dry media eg graphite pencils, coloured pencils, charcoal, chalk, oil pastels, wax crayon, fine liners, felt tips, fabric pens, computer software, digital media; wet media eg paint, drawing inks, printing ink, bleach, spray paint, PVA glue, photographic chemicals

Techniques: drawing eg mark making, observational, technical, vector, illustration; painting eg watercolour, oil, acrylic, ink; printmaking eg lino, collagraphic, screen, stencil, photo-transfer; mixed-media; collage; photography eg film-based, photomontage, digital, image manipulation, multimedia, video, scanning, photocopying

Technologies: hand tools eg brushes, rollers, craft knives; mechanical tools eg printing press, photocopiers, projectors eg silk screens, light boxes, cameras, enlargers, scanners, computers

2 Be able to use graphic media, techniques and technology within own design work

Own design work: graphic outcomes eg illustrations, photographs, illustrative collage, narrative images, signs, logos, packaging, books, magazine feature layouts, magazine advertising, poster advertising campaigns, TV advertisements, film, programme titles

3 Be able to present design outcomes using graphic media, techniques and technology

Present: show designs eg portfolio presentation, exhibition, seminar presentation

Outcomes: eg finished maquettes, models, mounted prints, mounted artefacts, video, digital, on-screen, audio-visual

Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P1 investigate graphic media, techniques and technology [RL]	M1 compare the use of graphic media, techniques and technology in own and others' work	D1 evaluate the use of graphic media, techniques and technology in own and others' work
P2 use graphic media, techniques and technology to meet a design brief [CT]	M2 use graphic media, techniques and technology diversely to coherently meet a design brief	D2 use graphic media, techniques and technology independently and innovatively to meet a design brief
P3 present design outcomes using graphic media, techniques and technology. [SM]	M3 effectively present and review design outcomes using graphic media, techniques and technologies.	D3 present and review design outcomes imaginatively, using graphic media, techniques and technologies.

PLTS: This summary references where applicable, in the square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers	RL – reflective learners	SM – self-managers
	CT – creative thinkers	TW – team workers	EP – effective participators

Essential guidance for tutors

Delivery

The majority of learners' work will be carried out in the studio using 2D graphic and printing equipment. It would be helpful to include visits to design studios, exhibitions and websites as part of the programme.

This unit develops knowledge, skills and understanding of graphic media, techniques and technology. Tutors need to provide guidance on explaining experiments learners undertake. For example tutors demonstrate a technique then show how to explain it using the correct formal language. This will also be helpful when learners need to compare different techniques.

Most of the learners' work will be carried out in a studio or workshop environment where they should be able to participate in highly directed sessions. They will benefit greatly from demonstrations and discussions.

Tutors could develop an assignment for learners to work with, for example, 'the ideal world as seen on magazine covers, book jackets and web pages. Learners could look at existing media, and discuss and discuss the layout and colours with their peers. Learners could then design their own, and use different media to see if it changes the style and intended audience. Learners could pick their theme and create the same design in many different ways eg screen-printing, lino cutting and using computer programmes, then explain the differences.

Techniques should be compared for learners to show their understanding of the qualities of different materials and processes. For example, mono printing could be compared to screen printing, wet-based media with dry, developing ideas through hand drawn and digital designs.

To contextualise this investigation and experimentation and to reinforce learning, the teaching should include visits to galleries and, if possible, visits from professional practitioners. Learners should be directed towards examples of the work of others and encouraged to research these and their own examples using the internet, libraries and multimedia. Learners should use the work of other artists to gain inspiration and to develop ideas. Tutors could focus certain sessions on chosen designers and their work. Learners need guidance on ways to investigate the work of others, through, description, annotation and labelling.

An introduction to a wide range of media will help learners to gain confidence and interest in certain techniques. The media could include graphite and coloured pencils, charcoal, chalk, oil pastels, paint, printing inks and different materials eg mono printing and screen printing, photographic chemicals as well as computer software and digital media. The equipment necessary to teach the techniques associated with these media should be available, for example printmaking tools, screens and presses, cameras, photographic studio and darkroom equipment and chemicals, hand tools such as brushes and rollers, projectors, light boxes, photocopiers, computers, scanners and printers.

Health and safety issues must be addressed as learners may be combining traditional media with electrical technologies.

Demonstrations of how to present and examples of well-presented work will help learners, as their presented work will be marked. They should be able to use the techniques they have learnt in their experiments in their final presentation of work, and tutor discussions and presentation of peer work will help.

Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way in planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and/assessment
Introduction to the unit and brief.
Discussion of assessment criteria and learning outcomes.
Assignment 1: The Ideal World as Seen on Magazine Covers, Book Jackets and Web Pages Visit to gallery/studio. Recording primary sources of chosen topic with photography, sketches, drawings, photocopies. Visiting speakers.
Viewing work of artists and designers (contemporary and historical) using graphic media and technology in their work.
Demonstrations of new techniques, highlighting correct technical terms and key words.
Learner initiated primary research to develop ideas (developing photographs, scanning images, photocopying images, manipulating images using ICT).
Collecting secondary research, mounting and presenting it.
Learner initiated investigation of a variety of materials and techniques including: <ul style="list-style-type: none">• screen printing• drawing and illustration• printmaking eg lino, collagraphic, screen, stencil• photo-transfer• using fabric and fabric pens• collage• photography, lens-based and digital• using hand tools, cutters, craft knives and rollers.
Recording experiments (through selecting outcomes, taking photographs, printing developmental work, maquettes, etc) and writing notes, annotating, thumbnails etc.
Experimenting and improving skills in selected techniques.
Developing and/or practising skills in chosen technique/technology.
Comparing techniques (eg screen printing, mono printing).
Guidance in making informed choices about presentation.
Collating all developmental and experimental work.
Preparing backgrounds.
Mounting visual and written work.
Making or preparing a sketchbook, scrapbook, printing computer based work etc.
Learner initiated production of final outcomes.
Unit review and assessment.

Assessment

Learners should keep a record of their experimentation in a scrapbook, sketchbook or design sheets. Annotations or notes should evidence their experiments and the techniques they use. For a pass grade, learners must evidence a basic understanding of the ways in which graphic media, techniques and technologies are used. This may be shown as sketchbook evidence with simple annotations stating which media, techniques and technologies have been used, singly or in combination. An example of a simple annotation would be: 'I have scanned in different objects and used filters in our graphic program to make this image'.

Learners must use different techniques compare them and include their outcomes from their experiments. Learners could mount two different types of printing eg mono printing and screen-printing and compare the outcomes. For example, 'In my mono print I have left marks on the paper where I have rested my hand, but the screen print has very clean lines and edges.'

Learners must collect their developmental work from primary and secondary sources produce an outcome or outcomes. The outcome should show appropriate skill.

Ideas and finished work should be presented formally, work should be mounted using various techniques learnt throughout this unit, for example, screen-printing the background before mounting finished outcome/s.

To achieve a merit, learners must provide evidence in a sketchbook or on worksheets that they have a coherent understanding of the ways in which graphic media, techniques and technologies are used, singly or in combination: An example of a merit annotation would be 'After scanning in a selection of objects, I changed them on the computer to give my image this effect.'

Learners should demonstrate some independence in their approach to experimentation and comparison. Their explanations in their comparisons should be more in-depth and show a greater understanding of the materials and techniques and they should use graphic media, techniques and technologies consistently with skill and control. Learners should clearly identify the differences between materials and techniques, for example working from scanned images or from photocopies – explaining that the scanned image can be manipulated and enhanced before being printed would show a deeper understanding of the materials.

Learners should present and review diverse examples of their own work from primary and secondary sources and should show some degree of independent and personal development of ideas. The final outcomes should be presented effectively using well-developed techniques.

To gain a distinction, learners must show that they have an in-depth understanding of a wide variety of graphic media, techniques and technologies and that they have been able to build on their experimentations to develop ideas confidently using them with high levels of skill and control. Distinction level students should show imagination and creativity in their experiments and work mainly independently. Learners will be expected to actively participate in discussions and produce a wide variety of outcomes.

Learners should present their work with imagination and creativity, considering engaging and appropriate presentation techniques. Final pieces of work, whether they are on design sheets, on-screen or in sketchbooks, should show clarity and confidence and make use of the correct terminology throughout.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the pass, merit and distinction criteria in the assessment and grading grid. This is for guidance and it is recommended that centres either write their own assignments or adapt any Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1, P2, P3 M1, M2, M3 D1, D2, D3	Assignment 1: The Ideal World as seen on Magazine Covers, Book Jackets and Web Pages	Designer briefed to create visuals for hotel derived from a specific period.	Portfolio of evidence consisting of: <ul style="list-style-type: none"> research of existing front covers experimentation with materials, techniques and processes, with explanations comparisons of different media in outcomes produced final piece (including magazine front covers) display boards, sketchbooks, or scrapbooks.

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

Level 1	Level 2	Level 3
Introduction to Graphic Materials, Techniques and Processes	Working with Graphic Design Briefs	Computers in Art and Design
Introduction to Formal Drawing Techniques	Graphic Materials, Techniques and Processes	Photographic Media, Techniques and Technology
		Words and Images in Graphic Design

Essential resources

For this unit learners should have access to appropriate studio and workshop equipment. Depending on the materials the learner is using, this may include digital or manual cameras, printing equipment, computer software and hardware and a range of drawing materials. It would be helpful if learner had access to the internet, design books and other artists work.

Employer engagement and vocational contexts

Centres should develop links with practising graphic, to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

- local and regional Business Link – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of 'live projects', for example, to support the vocational content of the unit and programme.

Creative and Cultural Skills (www.ccskills.org.uk), the Sector Skills Council for Arts, Crafts and Design have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the arts, crafts and design sector, including job descriptions.

Skillset, the Sector Skills Council for Creative Media (www.skillset.org), provides details (www.skillset.org/careers) on careers and the industry and has a regularly updated news and events page.

Indicative reading for learners

Textbooks

Berger W – *Advertising Today* (Phaidon Press, 2003) ISBN 978-0714843872

Bernstein D – *Advertising Outdoors* (Phaidon Press, 2004) ISBN 978-0714843872

Caplin S and Banks A – *The Complete Guide to Digital Illustration* (Ilex, 2003) ISBN 978-1904705000

Cates C et al – *Photoshop CS4 Bible* (John Wiley and Sons, 2009) ISBN 978-0470345177

Chapman N and Chapman J – *Digital Multimedia* (John Wiley and Sons, 2009) ISBN 978-0470512166

Cullen K – *Layout Workbook: A Real-world Guide to Creating Powerful Pieces* (Rockport, 2005)
ISBN 978-1592531585

Dabner D – *Graphic Design School: The Principles and Practices of Graphic Design* (Thames & Hudson, 2004)
ISBN 978-0500285268

Digby J and Fiell J – *The Collage Handbook* (Thames & Hudson, 1987) ISBN 978-0500274361

Fiell C – *Contemporary Graphic Design* (Taschen, 2007) ISBN 978-3822852699

Fletcher A – *The Art of Looking Sideways* (Phaidon Press, 2001) ISBN 978-0714834498

Fuller R and Fuller L – *Photoshop CS3 Bible* (John Wiley and Sons, 2007) ISBN 978-0470115411

Haslam A – *Book Design (Portfolio Series)* (Laurence King, 2006) ISBN 978-1856694735

Heller S and Ilic M – *Handwritten: Expressive Lettering in the Digital Age* (Thames & Hudson, 2006)
ISBN 978-0500285954

Jones G and Shaner P – *Real World Digital Video* (Peachpit Press, 2004) ISBN 978-0321238337

Lhotka B, Krause D and Schminke K – *Digital Art Studio: Techniques for Combining Inkjet Printing with Traditional Art Materials* (Watson-Guptill, 2004) ISBN 978-0823013425

Lupton E – *DIY: Design It Yourself* (Princeton Architectural Press, 2005) ISBN 978-1568985527

McAlhone B and Stuart D – *A Smile in the Mind* (Phaidon Press, 1998) ISBN 978-0714838120

Odling-Smee A and For H – *The New Handmade Graphics: Beyond Digital Design* (RotoVision, 2003)
ISBN 978-2880467036

Plazm et al – *100 Habits of Successful Graphic Designers: Insider Secrets from Top Designers on Working Smart and Staying Creative* (Rockport, 2005) ISBN 978-1592531882

Victionary (Editor) – *Graphics Alive* (Index Book, 2006) ISBN 978-9889822828

Walsh Macario J – *Graphic Design Essentials: Skills, Software and Creative Solutions* (Laurence King, 2009)
ISBN 978-1856695992

Zeegeen L – *Digital Illustration: A Masterclass in Digital Image-Making* (RotoVision, 2005)
ISBN 978-2880467975

Websites

www.allgraphicdesign.com

News, advice and jobs for graphic designers

www.britishcouncil.org/arts-design-graphic-design.htm

British Council Arts pages

www.computerarts.co.uk

Computer Arts news and tips

www.printmaker.co.uk/sprnt.html

Printmaker studios

Delivery of personal, learning and thinking skills

The table below identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit.

Skill	When learners are ...
Creative thinkers	making a collection of work from primary and secondary sources, and experimenting with materials producing an outcome
Reflective learners	explaining the media techniques used in all their experiments and comparing them, discussing any positive or negative outcomes
Self-managers	organising resources and presenting their final outcomes.

Although PLTS are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
Independent enquirers	discovering new techniques and recording their findings
Creative thinkers	working creatively and presenting work in sketchbooks or on design sheets
Reflective learners	analysing materials and comparing them
Team workers	engaging in discussion with peers, talking about their work and their outcomes
Self-managers	prioritising actions when producing their outcomes, and collecting all work created throughout the unit
Effective participators	presenting and discussing their work.

● Functional Skills – Level 2

Skill	When learners are ...
ICT – Use ICT systems	
Select, interact with and use ICT systems independently for a complex task to meet a variety of needs	researching artists who use the various graphic techniques using digital cameras, scanners, printers and other software
Use ICT to effectively plan work and evaluate the effectiveness of the ICT system they have used	comparing materials and processes
ICT – Find and select information	
Select and use a variety of sources of information independently for a complex task	researching digital based work
Access, search for, select and use ICT-based information and evaluate its fitness for purpose	researching digital based work
ICT – Develop, present and communicate information	
Enter, develop and format information independently to suit its meaning and purpose including: <ul style="list-style-type: none"> • text and tables • images • numbers • records 	printing text when using fonts and titles. working from images, scanning images and printing outcomes
Bring together information to suit content and purpose	presenting work for assessment
Present information in ways that are fit for purpose and audience	presenting work for assessment
Select and use ICT to communicate and exchange information safely, responsibly and effectively including storage of messages and contact lists	producing a digital portfolio
Mathematics	
Understand routine and non-routine problems in a wide range of familiar and unfamiliar contexts and situations	measuring when mounting work and displaying outcomes

Skill	When learners are ...
English	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	engaging in discussions with peers and with the tutor making presentations
Reading – compare, select, read and understand texts and use them to gather information, ideas, arguments and opinions	forming opinions on different techniques and outcomes, using annotations and/or notes
Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively	annotating work, making notes, explaining techniques evaluating.