Higher National Unit Specification

General information for centres

Unit title: Graphic Production for Commercial Printing

Unit code: DV63 34

Unit purpose: This Unit is designed to equip candidates with the basic knowledge and skills necessary for the preparation of artwork for the most commonly used commercial print processes. It also provides candidates with basic knowledge of the main commercial printing processes in current use. Furthermore, it forms a basis for progression to specialist Units where more complex aspects of the design for print processes are involved.

On completion of this Unit candidate should be able to:

1   Describe the main commercial printing processes in current use.
2   Describe the pre-press sequence for a commercial printing process.
3   Demonstrate accurate preparation of digital artwork files for a pre-press process.

Credit points and level: 1 HN Credit at SCQF level 7: (8 SCQF credit points at SCQF level 7*).

SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.

Recommended prior knowledge and skills: Access to this Unit is at the discretion of the centre. Since candidates will be required to follow the design process in the practical aspects of this Unit, it would be helpful if they had relevant graphic design and related IT skills.

Core Skills: There are opportunities to develop the Core Skill of Information Technology at SCQF level 6 in this Unit, although there is no automatic certification of Core Skills or Core Skills components. Further details are provided in the support notes.

Context for delivery: If this Unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

Assessment: This Unit requires two instruments of assessment. For Outcomes 1 and 2 candidates are required to supply written or oral responses to a series of set questions relating to printing techniques and the pre-press process. Assessment should be carried out in controlled conditions and in a single event, lasting no more than one and a half hours.

In order to demonstrate their competence in producing artwork files, Outcome 3 requires candidates to successfully complete a practical project. There is also the possibility for assessment of this Outcome to be integrated with other Units where the accurate production of artwork is required.

Higher National Unit specification: statement of standards

Unit title: Graphic Production for Commercial Printing

Unit code: DV63 34

The sections of the Unit stating the Outcomes, knowledge and/or skills, and Evidence Requirements are mandatory.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the knowledge and/or skills section must be taught and available for assessment. Candidates should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Describe the main commercial printing processes in current use

Knowledge and/or skills

♦   Commercial print processes
♦   Applications
♦   Types of printed product
♦   Economic factors

Evidence Requirements

Candidates will need to provide evidence to demonstrate their knowledge and/or skills by showing that they can:

♦   Provide accurate technical descriptions of each of the main printing processes in current use, including the type and quantities of material produced by each of them and the economic factors related to production. This will take the form of oral or written responses to the following three components:

— 15 multiple choice questions relating to print processes. To achieve this component, candidates must have at least nine correct answers.

— Short response questions and answers which require candidates to accurately describe each of the main printing processes.

— A matching grid where candidates are required to relate printing techniques to 12 specified quantities and types of material. To achieve this component candidates must have at least eight correct answers.

Assessment should be conducted in controlled conditions and in a single event, lasting no more than one and a half hours. Candidates may bring to the assessment notes they have made personally during visits or talks. They may not bring textbooks, handouts or material not prepared by themselves. Appropriate arrangements should be made for candidates who provide oral responses.

Higher National Unit specification: statement of standards (cont)

Unit title: Graphic Production for Commercial Printing

Assessment guidelines

The assessment of this Outcome may be combined with the assessment of Outcome 2 as a single instrument, and may be suitable for online assessment.

Outcome 2

Describe the pre-press sequence for a commercial printing process

Knowledge and/or skills

A candidate will be required to know the correct sequence for the preparation of digital artwork, from the point of client approval of a design to final preparation for production.

♦ Client approval
♦ File types
♦ Image resolution
♦ Gather files for output
♦ Methods of supplying files to pre-press
♦ Open Press Interface
♦ Pre-flight check
♦ Digital proofs
♦ Client sign-off of proofs
♦ Preparation for setting up press work

Evidence Requirements

Candidates will need to provide evidence to demonstrate their knowledge and/or skills by showing that they can:

♦ Use the correct terminology to provide an accurate and clear description, in correct chronological order, of the pre-press sequence leading to the final preparation for a print run. This will take the form of oral or written responses to a short answer question paper.

Assessment should be conducted in controlled conditions and in a single event. Candidates may bring to the assessment notes they have made personally during visits or talks. They may not bring textbooks, handouts or material not prepared by themselves. Appropriate arrangements should be made for candidates who provide oral responses.

Assessment guidelines

This Outcome may be combined with the assessment of Outcome 1 as a single instrument, in which case the total time allocated to assessment should not exceed one and a half hours.

This Outcome may be suitable for online assessment.

Higher National Unit specification: statement of standards (cont)

Unit title: Graphic Production for Commercial Printing

Outcome 3

Demonstrate accurate preparation of digital artwork files for a pre-press process

Knowledge and/or skills

♦ Analysis of a brief, taking into consideration limitations in terms of colour, size and any other factors defined
♦ Identification of an appropriate printing process
♦ Selection and use of appropriate software and hardware for the production of digital artwork files
♦ Differentiation between spot and full colour models and applying accurate specifications appropriate to each
♦ Application of appropriate scanning specifications for continuous tone material
♦ Creating bleeds and crops appropriate to print finishing requirements
♦ Managing file storage
♦ Accuracy of typesetting
♦ Production of composite and separation proofs and the application of appropriate correction techniques

Evidence Requirements

Candidates will be need to provide evidence to demonstrate their knowledge and/or skills by showing that they can:

♦ produce artwork appropriate to the brief
♦ produce accurately prepared artwork for digital pre-press production
♦ supply digital artwork, composite colour proof and separations

The assessment should take the form of a practical project.

Assessment guidelines

This is a single, supervised, practical project that leads to a specific assessment point. It is essential that candidates are made aware that the production of digital artwork must conform to industry standards. Assessment of this Outcome could be integrated with another Unit that requires the candidate to prepare digital artwork for commercial printing.

Administrative Information

Unit code: DV63 34

Unit title: Graphic Production for Commercial Printing

Superclass category: JB

Date of publication: August 2006

Version: 01

Source: SQA

Higher National Unit specification: support notes

Unit title: Graphic Production for Commercial Printing

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

Guidance on the content and context for this Unit

This Unit is intended to introduce candidates to the main commercial print processes in current use, in particular Lithography, Digital Printing, Gravure and Screen Printing. There is no requirement to cover Letterpress but tutors may wish to mention this in a historical context.

Outcome 1 not only requires candidates to describe the print processes but also to recognise which process relates to the quantity and production of specific material. Factors relating to the cost effectiveness of each process in relation to quantities should also be outlined here.

In Outcome 2, candidates look at the sequence by which digital artwork is prepared for print production and the organisational skills necessary to ensure quality of production. For both Outcomes 1 and 2 it would be highly beneficial if candidates were to experience the relevant print processes in an industrial situation. However, where this is not possible, tutors should rely on suitable text books and handouts to deliver the theoretical aspects of this Unit.

The Unit is also intended to develop the skills needed to prepare digital artwork files for industry standard pre-press production and Outcome 3 provides candidates with the opportunity to do this. Emphasis should be placed on technical accuracy in all aspects of this practical project and in particular the specification of spot and full colour inks. It is essential that candidates are fully aware of the differences between these.

While this is both a theoretical and technical Unit, candidates should be encouraged to apply aesthetic values to the creation of their designs.

Guidance on the delivery and assessment of this Unit

This Unit is likely to form part of a Group Award which is primarily designed to provide candidates with technical or professional knowledge and skills related to graphic design and visual communication. It would be expected that this Unit would be delivered at the start of the Group Award and candidates who successfully achieve it would progress to more advanced study.

It is recommended that assessment of the Unit will be by two instruments of assessment. There is an opportunity for Outcomes 1 and 2 to be integrated using one single instrument of assessment. This will be a combination of the following: a 15-question multiple choice paper relating to print processes; a short response question paper which requires candidates to describe (1) each of the main printing processes and (2) the pre-press process. It is recommended that the part of the question paper which requires the candidates to relate printing techniques to 12 specified quantities and types of material takes the form of a 'matching' grid with tick-boxes. Candidates should be able to undertake this assessment in one and a half hours.

Higher National Unit specification: support notes (cont)

Unit title: Graphic Production for Commercial Printing

Outcome 3 will take the form of a practical design project where a brief is set by the assessor. Candidates will be required to produce a design and corresponding digital artwork suitable for industrial pre-press production. Emphasis must be placed on accuracy in every aspect of the project and where possible, colour separation proof prints should be used to check quality. As well as submitting their digital files for assessment, candidates must also provide composite colour proofs. Candidates should be supervised during the course of this project and it is envisaged that assessment of this Outcome will take no more than one and a half hours. Assessment should be conducted in conditions where arrangements have been put in place to ensure the authenticity of the candidate's work.

Opportunities for developing Core Skills

Candidates should have many opportunities to develop sophisticated skills in the use of technology as they work towards a practical design to a specific brief.

Candidates need to produce and present materials to a standard which would be acceptable in industry as they acquire the technical skills to effectively undertake creative projects and prepare digital artwork files for industry standard pre-press production work. Formative opportunities to create materials and designs using models with appropriate use of a range of techniques and processes may be a useful way to maximise skills and the effectiveness and impact of materials created. Class group discussion and analysis of exemplar materials, with practical demonstrations of processes, preferably in an industry setting, could underpin unit delivery. The contribution of technology to accuracy, which is essential in every aspect of the project, could be emphasised.

Open learning

Outcomes 1 and 2 of this Unit may be suitable for delivery by distance learning. However, it would require planning by the centre to ensure the sufficiency and authenticity of candidate evidence. It would be necessary for the assessment of these Outcomes to be delivered in a supervised environment under controlled conditions. For further information and advice please refer to the SQA document *Assessment and Quality Assurance of Open and Distance Learning* (A1030) which is available on SQA's website www.sqa.org.uk.

Candidates with additional support needs

This Unit specification is intended to ensure that there are no artificial barriers to learning or assessment. The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering alternative Outcomes for Units. For information on these, please refer to the SQA document *Guidance on Alternative Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs,* which is available on SQA's website: **www.sqa.org.uk**.

General information for candidates

Unit title: Graphic Production for Commercial Printing

This Unit is designed to provide you with knowledge of the main commercial printing processes currently in use and the sequence of events that graphic designers are required to follow to ensure that artwork is accurately prepared for production. It will also provide you with an opportunity to develop your practical skills in the preparation of artwork to a standard commensurate with employment in the industry.

In order to complete this Unit successfully, you will be required to achieve a satisfactory level of performance in three Outcomes, two of which are written or orally assessed, and relate to the theories and applications of print processes. A single assessment will be conducted in controlled conditions, lasting no more than one and a half hours. You may bring to the assessment notes you have made personally during visits or talks but you may not bring textbooks, handouts or other material not prepared by yourself.

The third Outcome requires you to undertake a practical project from a brief supplied by the tutor. Here, you will be required to provide a design concept and develop it to the stage of finished artwork, as well as producing a colour proof. It may be possible to achieve this Outcome by integrating it with any Unit where you are required to produce artwork for print.