

Higher National Unit Specification

General information for centres

Unit title: Illustrative Diagram: Perspective Projection

Unit code: DV66 34

Unit purpose: This project based Unit is designed to provide candidates with the knowledge and skills necessary to create illustrative diagrams in an industrial context. The Unit is aimed at those wishing to develop skills in the area of creating illustrative diagrams using perspective projection.

On completion of this Unit, the candidate should be able to:

- 1 Apply perspective projection to create an illustrative diagram.
- 2 Create a solution to an illustrative diagram project using perspective projection method in an industrial context.

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. Candidates should be able to construct perspective and diagrammatic imagery. An understanding of the appropriate application of both topics would be beneficial.

Core Skills: There are opportunities to develop the Core Skills of Numeracy and Problem Solving at SCQF level 6 in this Unit, although there is no automatic certification of Core Skills or Core Skills components. Further detail is 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: Outcomes 1 and 2 should be practical. Outcomes 1 and 2 could be assessed individually but it is recommended that both Outcomes should be assessed as a single graphics assignment.

In the assignment, candidates should create an illustrative diagram that fulfills the requirements of a given brief. It is recommended that candidates should be allowed to refer to relevant course material.

General information for centres (cont)

It should be noted that candidates must achieve all the minimum evidence specified for each Outcome in order to achieve the Unit.

It is essential that centres ensure that the evidence generated is the candidate's own work.

Higher National Unit specification: statement of standards

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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

Apply perspective projection to create an illustrative diagram

Knowledge and/or skills

- ◆ Perspective projection methods
- ◆ Diagram development
- ◆ Viewpoint selection
- ◆ Construction accuracy
- ◆ Scale selection and format
- ◆ Appropriate medium/media

Evidence Requirements

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

- ◆ create an appropriately constructed perspective
- ◆ select an appropriate viewpoint
- ◆ control scale in terms of subject and format
- ◆ accurately represent subject in perspective
- ◆ select and use medium/media appropriately in terms of scale, form, colour and surface quality
- ◆ create an accurate illustrative diagram that is readily understood

Evidence should be generated through a practical project undertaken in open conditions. Candidates should be allowed to refer to relevant course material.

Assessment guidelines

The assessment for this Outcome should take the form of a practical project. The assessment can be carried out as a single Outcome but it is recommended that it is assessed in conjunction with Outcome 2. This is at the discretion of the presenting centre and will be determined primarily by the project brief. The project brief should be devised by the tutor delivering the Unit. It is recommended that centres develop checklists to support the assessment requirements for each of the knowledge and/or skills items.

Higher National Unit specification: statement of standards (cont)

Unit title: Illustrative Diagram: Perspective Projection

Outcome 2

Create a solution to an illustrative diagram project using perspective projection method in an industrial context

Knowledge and/or skills

- ◆ Research assimilation
- ◆ Analytical sketch visuals
- ◆ Imagery for a synthesized solution to a brief
- ◆ Produce a work plan

Evidence Requirements

Candidates will need to provide evidence to demonstrate their knowledge and/or skills by showing that, in response to a given brief, they can:

- ◆ assimilate subject matter information
- ◆ create analytical visuals
- ◆ create a synthesized visual solution which is appropriate with respect to the coherent integration of graphic elements and visual explanation
- ◆ produce a work plan with respect to timescale, resources and processes involved

Evidence should be generated through a practical project undertaken in controlled, supervised conditions. Candidates should be allowed to refer to relevant course material.

Assessment guidelines

The assessment for both the Outcomes should take the form of a practical project. The assessment can be carried out at various points of the Unit presentation, as it relates to the development of a work plan and the various stages of the design process. This is at the discretion of the presenting centre and will be determined primarily by the project brief. The project brief should be devised by the tutor delivering the Unit. It is recommended that centres develop checklists to support the assessment requirements for each of the knowledge and/or skills items.

Administrative Information

Unit code:	DV66 34
Unit title:	Illustrative Diagram: Perspective Projection
Superclass category:	VF
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Higher National Unit specification: support notes

Unit title: Illustrative Diagram: Perspective Projection

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 has been written in order to allow candidates to develop knowledge, understanding and skills in the following areas:

- ◆ apply perspective projection to create an illustrative diagram
- ◆ create a solution to an illustrative diagram project using perspective projection method in an industrial context

This Unit is at SCQF level 7 and has been developed as part of the HNC/HND Visual Communication Group Award. However this does not preclude the use of the Unit in other Group Awards where qualification design teams feel this to be appropriate.

Guidance on the delivery and assessment of this Unit

This Unit is mostly practical in nature and should be delivered with that in mind.

The reference material used in creating the imagery should reflect the time allocation unless part of an integrated presentation.

The imagery could be created using traditional media and drawing boards or computer generated or a mixture of both where appropriate.

All assessment should be conducted in conditions where arrangements have been put in place to ensure authenticity of the candidate's work.

Opportunities for developing Core Skills

Candidates will analyse requirements and seek solutions involving a range of practical issues as they apply theoretical knowledge and understanding to create a solution to a complex design project and work towards specific objectives in illustrative diagram development. Identifying and considering all variables, including scale and media, and analysing the relative significance of each before identifying and selecting a design approach, will provide opportunities to develop elements of planning, critical thinking and general problem solving skills to an advanced level. Accurate calculation and the ability to measure, construct and manipulate complex graphic information underpins the competencies developed in the Unit. The development of initial designs will involve on-going evaluation and modification. Candidates will need to produce and present materials to a standard which would be acceptable in industry.

Analysing and evaluating the potential impact of the practical design solution selected will be critical, and candidates are likely to benefit from the availability of current examples of materials as models for evaluation of effectiveness.

Higher National Unit specification: support notes (cont)

Unit title: Illustrative Diagram: Perspective Projection

Open learning

This Unit could be delivered by open learning. However it would require planning by the centre to ensure sufficiency and authenticity of candidate evidence.

If this Unit is delivered by open or distance learning methods, additional planning and resources may be required for candidate support, assessment and quality assurance.

New authentication tools may have to be devised for assessment and re-assessment purposes. For further information and advice please refer to the SQA document *Assessment and Quality Assurance for Open and Distance Learning*.

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: Illustrative Diagram: Perspective Projection

On completion of this Unit, you should be able to:

- ◆ apply perspective projection to create an illustrative diagram
- ◆ create a solution to an illustrative diagram project using perspective projection method in an industrial context

The Unit has been designed to provide you with the knowledge and skills that will enable you to create illustrative diagrams using perspective projection methods.

The formal assessment for this Unit is practical.

You will be required to create an illustrative diagram using perspective projection. A brief for the assessment of each Outcome will be prepared and submitted to you by your tutor.

The creation of a work plan is required at the beginning of an assignment, in order to plan for the development of the images as you go through the design process.