Higher Course Assessment Specification

Higher Graphic Communication Course Assessment Specification (C735 76)

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Please refer to the note of changes at the end of this Course Assessment Specification for details of changes from previous version (where applicable).

Course outline

Course title: Higher Graphic Communication

SCQF level: 6 (24 SCQF credit points)

Course code: C735 76

Course assessment code: X735 76

The purpose of the Course Assessment Specification is to ensure consistent and transparent assessment year on year. It describes the structure of the Course assessment and the mandatory skills, knowledge and understanding that will be assessed.

Course assessment structure

Component 1 — question paper	70 marks
Component 2 — assignment	70 marks
Total marks	**140 marks**

This Course includes six SCQF credit points to allow additional time for preparation for Course assessment. The Course assessment covers the added value of the Course.

Equality and inclusion

This Course Assessment Specification has been designed to ensure that there are no unnecessary barriers to assessment. Assessments have been designed to promote equal opportunities while maintaining the integrity of the qualification.

For guidance on assessment arrangements for disabled learners and/or those with additional support needs, please follow the link to the Assessment Arrangements web page: www.sqa.org.uk/sqa/14977.html.

Guidance on inclusive approaches to delivery and assessment of this Course is provided in the *Course Support Notes*.

Assessment

To gain the award of the Course, the learner must pass all of the Units as well as the Course assessment. Course assessment will provide the basis for grading attainment in the Course award.

Course assessment

SQA will produce and give instructions for the production and conduct of Course assessments based on the information provided in this document.

Added value

The purpose of the Course assessment is to assess added value of the Course as well as confirming attainment in the Course and providing a grade. The added value for the Course will address the key purposes and aims of the Course, as defined in the Course Rationale. It will do this by addressing one or more of breadth, challenge, or application.

To achieve success in the Course, learners must show that they are able to apply these to respond effectively to situations within both practical and theoretical graphics contexts.

In this Course assessment, added value will focus on the following:

♦ breadth — drawing on knowledge and skills from across the Course
♦ challenge — requiring greater depth or extension of knowledge and/or skills
♦ application — requiring application of knowledge and/or skills in practical or theoretical contexts as appropriate

This added value consists of a question paper and an assignment.

The question paper will require learners to demonstrate aspects of breadth and application in a graphic context, based on recognised graphic principles and those used in industry and commerce.

The assignment will require the learner to produce practical responses to a graphics situation. This will allow the learner to confirm their capabilities through challenge and application.

This will be achieved through:

♦ applying knowledge and understanding from across the Course to describe and explain graphic communication techniques, methods and standards
♦ applying knowledge and understanding from across the Course to interpret unfamiliar, potentially complex graphic communications
♦ applying skills, knowledge and understanding from across the Course to produce a response to a graphic communication brief

Grading

Course assessment will provide the basis for grading attainment in the Course award.

The Course assessment is graded A–D. The grade is determined on the basis of the total mark for all Course assessments together.

A learner's overall grade will be determined by their performance across the Course assessment.

Grade description for C
For the award of Grade C, learners will have demonstrated successful performance in all of the Units of the Course. In the Course assessment, learners will typically have demonstrated successful performance in relation to the mandatory skills, knowledge and understanding for the Course.

Grade description for A
For the award of Grade A, learners will have demonstrated successful performance in all of the Units of the Course. In the Course assessment, learners will typically have demonstrated a consistently high level of performance in relation to the mandatory skills, knowledge and understanding for the Course.

Credit
To take account of the extended range of learning and teaching approaches, remediation, consolidation of learning and integration needed for preparation for external assessment, six SCQF credit points are available in Courses at National 5 and Higher, and eight SCQF credit points in Courses at Advanced Higher. These points will be awarded when a grade D or better is achieved.

Structure and coverage of the Course assessment

The Course assessment will consist of two Components: a question paper and an assignment.

Component 1 — question paper

The purpose of the question paper is to assess learners' skills, knowledge and visual literacy through the graphics techniques and practice they have acquired.

The question paper will have one Section. The format of the questions will allow a variety of response types across the paper.

The question paper will give learners an opportunity to use their graphic communication skills, knowledge and understanding to:

♦ demonstrate their understanding of computer-aided design/draughting techniques including commercial / industrial practice
♦ demonstrate reasoning ability by justifying graphics in specific contexts
♦ explain the use of digital technology in graphic communication
♦ interpret/respond to given 2D, 3D and pictorial drawings and sketches
♦ identify and describe drawing standards, protocols and conventions
♦ define, describe and evaluate the use of recognised desktop publishing features
♦ describe, define and evaluate the use of design elements and principles in promotional graphics
♦ comment knowledgeably on graphic communication as it impacts on the environment and society

The question paper will have 70 marks out of a total of 140 marks. This represents 50% of the overall marks for the Course Assessment.

Approximately 50% of the marks will be awarded for question related to 2D Graphic Communication and 50% to 3D and Pictorial Graphic Communication.

Questions will be integrated and give learners the opportunity to demonstrate knowledge and understanding sampled from across the Course (as described in the 'Further Information on Mandatory Course Coverage' section of this document).

A proportion of marks will be available for more challenging questions which could generally require interpretation and or integration of more complex graphic communications or in the complexity of the expected response, the descriptions and /or justifications of more detailed and/or complex processes, or problem solving e.g. in computer-aided design and draughting techniques and processes.

Learners may support their answers by sketching (if desired) to further illustrate and amplify their response. Sketching will not be a requirement. There will be no questions requiring the learner to draw.

The format of the questions will be a mixture of limited and extended responses and/or scenario-based questions allowing for either written and/or sketched answers and illustrations for descriptive purposes, if required.

Component 2 — assignment

The purpose of the Graphic Communication assignment is to draw on, extend and apply the skills and knowledge developed and acquired during the Course.

Evidence will be produced through the learner's graphic response to an appropriately challenging graphic communication brief.

The assignment will give learners the opportunity to:

♦ Demonstrate creativity in responding to realistic and contextualised graphic tasks and situations.
♦ Demonstrate skills in the use of graphic communication technologies in meeting a purpose.
♦ Produce relevant preliminary, production and promotional graphic responses to a brief.
♦ Apply illustration and presentation techniques to create graphics responses with relevant visual impact and clear purpose.
♦ Produce 2D and 3D production drawings1, applying appropriate standards, protocols and conventions; including third angle projection, dimensioning, line type and the use of scale.
♦ Produce promotional graphic publications with relevant visual impact that are planned and designed to meet a market, purpose, content and style.
♦ Review, evaluate and justify their decisions on the choices of graphic items and communication techniques employed.

Time will be required for:

♦ preparation for the assignment, which could include considering exemplar assignments and practising required skills
♦ carrying out the stages of the assignment, with teacher guidance and support
♦ reviewing and evaluating the learner's progress and justifying the selected techniques employed

The assignment should clearly demonstrate application of knowledge and skills, at an appropriate level from both the 2D Graphic Communication and 3D and Pictorial Graphic Communication Units (as defined in the 'Further mandatory information on Course coverage' section of this document).

The assignment will have 70 marks out of a total of 140 marks. This represents 50% of the overall marks for the Course Assessment.

Marks will be awarded for:

♦ Analysis and research
♦ Preliminary graphics
♦ Production drawings and CAD models
♦ Promotional documents or publication

Evidence will be in the form of a graphic communication assignment folio.

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[1] Drawing in this instance includes manual or electronic production methodologies.

Setting, conducting and marking of assessment

Question paper

The question paper will be set and marked by SQA, and conducted in centres under conditions specified for external examinations by SQA. Learners will complete the question paper in 2 hours.

Controlled assessment — assignment

The assignment is:

♦ set by SQA
♦ conducted under some supervision and control

Evidence will be internally marked by centre staff in line with SQA marking instructions.

All marking will be quality assured by SQA.

Setting the assessment

Set by SQA.

A bank of assignments will be provided and there will be choice from this bank.

Conducting the assessment

Conducted under some supervision and control.

The assignment will be carried out under open book conditions, but supervised to ensure that the work presented is the learner's own work.

The teacher/lecturer may also give learners support and guidance to help them progress through each stage of the assignment; where any significant amount of support is provided, this should be reflected in the marks awarded. While the learner may be provided with feedback to help them achieve the next stage of the assessment, they are not allowed to be re-assessed on stages already completed.

The assignment is designed to discriminate between learners, and therefore would be expected to provide a wide range of marks. Stronger learners should be able to complete the assignment successfully with minimal support and guidance. Weaker learners may not be able to complete all aspects of the assignment within a reasonable time, or may require significant assistance, and so would achieve a lower total mark.

Once the assignment has been completed and assessed, it should not be returned to the learner for further work to improve their mark.

Further mandatory information on Course coverage

The following gives details of mandatory skills, knowledge and understanding for the Higher Graphic Communication Course. Course assessment will involve sampling the skills, knowledge and understanding. This list of skills, knowledge and understanding also provides the basis for the assessment of the Units of the Course.

The Course assessment (question paper and assignment) will require learners to draw on and apply knowledge of any of the concepts listed below. This table should be read in conjunction with the descriptions of the question paper and assignment.

The following gives details of the skills, knowledge and understanding.

Component 1 — question paper	
The question paper Component will require learners to draw on and apply knowledge and understanding (when responding to and interpreting given graphics or images and in theoretical situations or scenarios) of a sample from the topic areas listed below.	
Topic area	
Graphic types	Knowledge and understanding of the role of preliminary, production and promotional graphics in graphic communication activities.
Manual techniques	Knowledge and understanding of the use and role of manual graphic communication techniques and processes and their relative merits compared to electronic methods. Knowledge and understanding of a range of common manual graphics media.
Computer-aided techniques	Knowledge and understanding of computer-aided techniques, computer-aided design and draughting, desktop publishing, digital capture/input and output techniques and devices.
Skills in applying drawing standards, protocols and conventions	Knowledge and understanding of recognised drawing standards, protocols and conventions through application, identification and recognition in given contexts, views and items. Line types (including dimension lines, centre line, hidden detail, cutting planes, fold lines), dimensioning (linear, radial, angular, diameter and tolerance), and symbols for sections, hatching, building construction, and third angle projection system.
Geometric shapes and forms	Knowledge, understanding and skills in spatial awareness when interpreting geometric shapes and forms and/or those used in the communication of products, components, assemblies and other items. Interpenetration and intersections of right prisms and cylinders, true shapes, ellipses, common geometric forms and partial cuts of those forms, components built from various simple combinations of forms.
Views and techniques	Knowledge and understanding of the role, benefits and use of a variety of views and techniques in 2D, and 3D and pictorial formats, in communicating geometric shapes and forms,

	objects, components, assemblies and other items including: third angle orthographic projection, tangency (internal and external radii location), true length and true shape, surface development, a range of sectional views (full, part and stepped), assembly drawings(minimum three parts), auxiliary views where required, exploded views (full and sectioned) cut-aways, oblique, isometric, planometric views, including use of appropriate scales.
Illustration techniques	Knowledge and understanding of the use of illustration techniques used to support effective graphic communications – the use, role and common techniques for representations of light, shadow, reflection, tone layout, material and texture. Knowledge of visual enhancement techniques, for instance, mediated reality.
Techniques used for producing effective promotional documents and publications	Knowledge, understanding, recognition and interpretation of the application of techniques used in the production of promotional documents including: colour (warm, cool, contrast, harmony, accent, advancing and receding), line, shape, texture, value, mass/weight, alignment, balance, contrast, depth, dominance, emphasis, proportion, rhythm, unity/proximity, white space and grid structure. 3D rendering techniques including: light source, materials, reflection, shade and sited environment.
Using technology in graphic communication	Knowledge and understanding of ranges, features and uses of graphic hardware and software computer systems and networks, file management, cloud computing, cloud storage and digital rights management; digital input and output devices and the advantages and limitations of computer-aided design/draughting.
Computer-aided design/draughting	Knowledge, understanding and recognition of the generic techniques, customs and practices used across a range of packages: **Drawing Tools:** line, circle, rectangle, ellipse, trim, array (linear, box and radial), offset, mirror, project edge, extend **Modelling Features:** extrude, revolve, loft, helix/helices, path (extrude/sweep along a path) **Modelling Edits:** shell, fillet (regular/consistent), chamfer (regular/consistent), fillet (irregular), chamfer (irregular), mirror, array(linear, box and radial), add, subtract, intersect **Constraints:** linear, radius, diameter, perpendicular, parallel, fixed, tangent, concentric **Terminology:** component, assembly, sub-assembly, work-plane/plane, axis, feature, profile, sketch, face, edge, datum, suppress

	Assembly: mate, align, centre axis, orientate, offset, tangent, stock/library components
	Views: solid model, wire frame
	Modelling Concepts: top down modelling, bottom up modelling, vertices, edges and faces, modelling tree/hierarchy, modelling plan
	File Types: dxf, 3ds, step/iges
	CAD libraries: the use and function of CAD libraries and stock models
Desktop publishing	Knowledge, understanding, recognition and interpretation of generic desktop publishing terms and techniques including: copy/paste, text box, handles, colour fill, colour picking, textured fills, gradient fill, margin, single and multi-page format, title, extended text, alignment, page size, orientation, drop caps, line-spacing,, heading, cropping (square and full cropping), text wrap, flow text along a path, bleed, pull quote, transparency, drop shadow, rotate, justification, paper sizing, reverse, column, gutter, caption, header and footer and folio.
	Planning strategies, thumbnails, visuals and annotation, proofs (pre-press), register marks, crop marks, run off.
	Bleed ,grid, guides, snap, master page layers, serif and sans serif, font styles, column rule/rule, indent, hanging indent, dropped capital, running headline, reverse, import/export.
	Knowledge and understanding of file types: Raster (tiff, jpg, png, bmp), vector (svg, dxf), including their advantages and disadvantages.
Graphic communication technology and society	Knowledge and understanding of the impact and influence of computer-aided design/draughting systems and graphic communication technologies on industry and society — for example: the paperless office, use of recycled materials, computer-aided design/draughting as it supports manufacturing and other industries, DTP in marketing and promotional activities, remote working, communication crossing international boundaries.

Component 2 — assignment

The purpose of the assignment is to assess the ability to draw on, extend and apply the knowledge and skills acquired during the Course. It will assess learners' skills in planning, developing, producing or supporting the production of a response to a graphic communication situation, problem and/or brief.

The assignment will require learners to demonstrate application of knowledge and skills, using both 2D Graphic Communication and 3D and Pictorial Graphic Communication, as defined in the table below.

Topic areas — the learner will draw upon these areas as required, or limited by the given graphic communication brief.

Graphic types	Skills in the production of effective preliminary, production and promotional graphics.
Manual techniques/computer aided techniques	Skills in the selection and application of manual and/or computer-aided and desktop publishing graphic techniques and processes (as required) using graphic communication applications and a range of common graphic media, equipment and/or devices, in the production of effective and informative graphic communications.
Skills in applying drawing standards, protocols and conventions	Application of recognised drawing standards, protocols and conventions in engineering and construction, symbols and standards. Line types (including dimension lines, centre line, hidden detail, cutting planes, fold lines), dimensioning (linear, radial, angular, diameter and tolerance), and symbols for sections, hatching, building construction, and third angle projection system - and as required, or limited by, a graphic communication problem, situation and/or brief.
Geometric shapes and forms	Skills in the production of graphics representing products, components, assembly and other items in supporting the production of the production of graphic communications. This will include interpenetration, intersections of right prisms and cylinders, true shapes, ellipses, common geometric forms and partial cuts of those forms, components built from various simple combinations of forms — as required or limited by, a graphic communication problem, situation and/or brief.
Views and techniques	Skills in the appropriate selection and use of 2D, and 3D and pictorial views and techniques, in the production of graphic communications. Including (as required, specified or limited by, a graphic communication problem, situation and/or brief) third angle orthographic projection, tangency (internal and external radii location), true length and true shape, surface development, a range of sectional views (full, part, revolved and stepped), assembly drawings (minimum three parts), auxiliary views where required, exploded views (full and sectioned) cut-aways, oblique, isometric, planometric views,

	including use of appropriate scales.
Skills and techniques in sketching (use of paper-based and/or electronic slates or similar devices)	Skills in applying electronic and/or manual sketching techniques (as required, specified or limited by, a graphic communication problem, situation and/or brief) including: proportion, line quality, vanishing points, line sketching using related orthographic views, single and two-point perspective, oblique and isometric forms.
Skills in illustration techniques using manual and/or computer-aided formats	Skills in using illustration techniques whilst creating effective and informative graphic communications including: representations of light, shadow, reflection, tone layout, material and texture. Visual enhancement techniques, for instance, mediated reality. Skills in the creation of scenes that place 3D models in relevant contexts.
Skills and creativity in producing effective promotional documents	Skills in the application of creative and effective techniques for research and investigation and in preliminary work, and in the production of effective promotional graphics and responses and/or solutions to, and as required, or limited by, a graphic, a communication problem, situation and/or brief. Considerations including (as required): colour (warm, cool, contrast, harmony, accent, advancing and receding), line, shape, texture, value, mass/weight , alignment, balance, contrast, depth, dominance, emphasis, proportion, rhythm, unity/proximity and white space, grid structure. Techniques used (as required) in the creation of promotional graphic displays with some complex features. Skills in the presentation of research/investigation and generating ideas for work to support a graphic communication proposal.
Computer-aided design/draughting	Skills in the application of techniques, customs and practices generically used across a range of 2D and 3D CAD packages as required: **Drawing Tools:** line, circle, rectangle, ellipse, trim, array (linear, box and radial), offset, mirror, project edge, extend **Modelling Features:** extrude, revolve, loft, helix/helices, paths **Modelling Edits:** shell, fillet (regular/consistent), chamfer (regular/consistent), fillet (irregular), chamfer (irregular), mirror, array (linear, box and radial), add, subtract, intersect

	Constraints: linear, radius, diameter, perpendicular, parallel, fixed, tangent, concentric **Terminology:** component, assembly, sub-assembly, work-plane/plane, axis, feature, profile, sketch, face, edge, datum, suppress **Assembly:** mate, align, centre axis/centre align, orientate, offset, tangent, stock/library components **Views:** solid model, wire frame **Modelling Concepts:** top down modelling, bottom up modelling, vertices, edges and faces, modelling tree/hierarchy, modelling plan **File Types:** dxf, 3ds , step/iges **CAD libraries** — the use and function of CAD libraries and stock models
Desktop publishing	Skills in the application and use of desktop publishing techniques in planning and producing promotional graphics
Safe working	The safe working practices and systems which support graphic communication activities in studios and other such working environments.

Administrative information

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History of changes to Course Assessment Specification

Course details	Version	Description of change	Authorised by	Date
	1.1	Additional information has been added to the Structure and coverage of the Course assessment section regarding the nature of the assignment and question paper. Component headings with supporting information have been included in the Further mandatory information on Course coverage section. CAD terms have been listed under subheadings for clarification. House style corrections made throughout.	Qualifications Development Manager	April 2014

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