Higher National Unit specification

General information for centres

Unit title: Compositing and Motion Graphics Advanced

Unit code: F1TF 35

Unit purpose: This Unit is designed to provide candidates with the knowledge and skills to produce advanced creative visual solutions with the help of Motion Graphics/Compositing software packages. The Unit's activities emphasise the preplanning stages, carrying through to the realisation and delivery of a final piece of work to satisfy a brief.

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

1   Pre-visualise a complex motion graphics sequence.
2   Create a complex motion graphics sequence.
3   Render and evaluate a complex motion graphics sequence.

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

*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. However, it would be highly advantageous for candidates to have some prior experience in digital editing or image manipulation and knowledge of digital file formats and their organisation, or to have undertaken the Higher National Unit, DW9K 34 *Compositing and Motion Graphics*.

Core Skills: There are opportunities to develop the Core Skills of Communication and Information Technology at SCQF level 6, and Problem Solving at SCQF level 6 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

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: Outcome 1 requires the candidate to plan the visual elements of a motion sequence using storyboard and digital pre-visualisation techniques. Outcome 2 requires the creation of a complex or multilayered motion graphics sequence or sequences with a minimum total duration of 60 seconds. Outcome 3 requires the output of the final, composite sequence into an appropriate format and the creation of a final evaluative report. Outcomes 1, 2 and 3 may be combined and assessed together within the context of the final piece, which contains the composite sequence and evidence of post-production techniques.

Higher National Unit specification: statement of standards

Unit title: Compositing and Motion Graphics Advanced

Unit code: F1TF 35

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

Pre-visualise a complex motion graphics sequence

Knowledge and/or Skills

♦ Storyboard pre-visualisation processes
♦ Digital pre-visualisation processes
♦ Motion
♦ Timing
♦ Content

Evidence Requirements

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

♦ produce a storyboard comprising a minimum of ten pre-visualisation panels which illustrates the content, motion and timing for the entire duration of the sequence
♦ produce a digital pre-visualisation which demonstrates content, motion and timing for the entire duration of the sequence

Assessment Guidelines

It is recommended that the Unit be assessed by carrying out a project to a given brief.

When producing pre-visualisation storyboard material, it would be beneficial if the candidate was encouraged to utilise a broad variety of visual techniques which allow for a range of creative expression and abilities. Examples of alternative processes could include collage, digital imaging, as well as drawing and sketching. Provided the processes utilised in producing the storyboard or pre-visualisation stage are broad enough, all candidates are able undertake this Outcome regardless of artistic ability.

The candidate may produce a digital pre-visualisation of the sequence in the compositing programme or another programme which allows graphics, motion, and timing to be demonstrated. The digital pre-visualisation rough should illustrate the entire sequence duration. Examples of a digital pre-visualisation are simple animated digital media files or a series of digital still files.

Higher National Unit specification: statement of standards (cont)

Unit title: Compositing and Motion Graphics Advanced

When producing storyboard or pre-visualisation materials, the emphasis could be on the communication of the sequence structure rather than on the aesthetic merits of the pre-visualisation itself. In some instances more than one sequence may be required to fulfil the minimum duration as outlined in Outcome 2. This is acceptable providing that roughs and preparatory planning materials are submitted for all sequences to be assessed.

Outcome 2

Create a complex motion graphics sequence

Knowledge and/or Skills

♦ Image Manipulation
♦ Time Manipulation
♦ Motion Manipulation
♦ Alpha Channel Manipulation

Evidence Requirements

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

♦ Import or create content material
♦ Produce a multilayered or multi node sequence (or sequences) with a total minimum duration of 30 seconds
♦ Manipulate the content material within the sequence utilising at least seven of the processes listed below:
  — Opacity
  — Keyframing
  — Image or object transformations such as scale, rotation, skew and perspective
  — Masking or Garbage Mattes
  — Alpha channels
  — Layering or Multiple image techniques
  — Motion typography
  — Blending OR Transfer modes
  — Time Remapping
  — Stylistic and Visual Effect manipulation
  — Keying (Chroma keying, Luma keying, Difference Keying)
  — Matting (Track Matting)
  — Colour Correction OR Colour Matching
  — Incorporation of 3d elements
  — Rotoscoping OR Frame Painting

A simple montage of sequential images will not suffice to comply with the brief, as the candidate should demonstrate substantial manipulation of the source material, which should include a clear understanding and considered application of the processes outlined in the Evidence Requirements. The completed sequence should adhere to the brief.

Higher National Unit specification: statement of standards (cont)

Unit title: Compositing and Motion Graphics Advanced

Assessment Guidelines

This Outcome requires the creation of a complex or multilayered motion graphics sequence or sequences with a minimum total duration of 30 seconds. Source material utilised by the candidate for the final sequence may include a broad range of digital or digitised files. This includes but is by no means limited to, video or digitised film footage, digital photographs, scanned images, collages, and other material converted to digital image formats.

While it is envisaged that the candidate will have substantial involvement in the creation of the original source material, this Unit could be assessed using source material provided by the delivery centre.

Outcome 3

Render and evaluate a complex motion graphics sequence

Knowledge and/or Skills

♦ Exporting or Rendering
♦ Digital Encoding Formats
♦ Digital Encoding Codecs
♦ Digital Encoding Methods
♦ Digital Resolution
♦ Digital File Archiving

Evidence Requirements

To successfully complete this Outcome, the candidate is required to:

♦ Render (or output) the composited sequence using codecs or encoding techniques for a minimum of two different types of digital format. The final output or encoded digital content should be copied to appropriate digital storage media.
♦ Evaluate the motion graphics sequence. The candidate will produce an evaluation report with reference to the following areas:

— the similarities or differences of the pre-visualisation to the final sequence
— the image quality of the final rendered sequence
— the audio quality of the final rendered sequence
— the logic or reasoning behind at least one creative or technical element within the sequence
— draw a conclusion — this should refer to and consider the final sequence. The conclusion must involve suggesting an alternative technique or modification to the sequence

Assessment Guidelines

This Outcome requires the output of the final, composite sequence into an appropriate format and the creation of a final evaluative report. It would be beneficial if the rendered digital output is encoded using formats and resolutions which are appropriate for delivery within the context of the given brief.

Administrative Information

Unit code: F1TF 35

Unit title: Compositing and Motion Graphics Advanced

Superclass category: KF

Original date of publication: July 2007

Version: 02

History of changes:

Version	Description of change	Date
02	Minor Amendment to Evidence Requirements for Outcome 2.	01/09/10

Source: SQA

SQA acknowledges the valuable contribution that Scotland's colleges have made to the development of Higher National qualifications.

Additional copies of this Unit specification can be purchased from the Scottish Qualifications Authority. Please contact the Customer Contact Centre for further details, telephone 0845 279 1000.

Higher National Unit specification: support notes

Unit title: Compositing and Motion Graphics Advanced

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 enable candidates to plan and produce a complex motion graphics or composited sequence and to apply advanced image manipulation techniques. The context of this Unit should reflect the interests of the candidate and the requirements of the brief. It is acknowledged that the techniques and intent of a composited sequence utilising, for example, live action footage with computer generated material, will differ from those of a motion graphics sequence which may have no live action based content at all.

Guidance on the delivery and assessment of this Unit

This Unit is designed to be practical in nature and, as such, could be run in conjunction with one or more visual production Units. This Unit could additionally be used to enable candidates to produce audio visual material for inclusion in other projects for other Units. There is sufficient commonality of toolsets, software and concepts to justify a joint Unit.

It is anticipated that as the candidate is required to demonstrate knowledge of image manipulation software, as well as editing and compositing techniques, that the Unit should be introduced at a later stage in the Group Award. Early introduction of such a Unit would leave candidates without sufficient time to acquire the necessary technical skills. It would be helpful if candidates could observe and experience a wide range techniques associated with image manipulation and the editing process.

Candidates are working in a context which requires the production of original computer aided design work. Candidates should be able to work unaided in the selection and organisation of material from a range of sources and the importing, modification and customising of applications to meet identified needs of purpose, audience and context.

It is recommended that the Unit be assessed based on carrying out a project to a given brief. The lecturer could act as the client for the finished design or opportunities could be taken to work with external clients.

The assessment of this Outcome could be combined by using a project that covers all three Outcomes. If the Outcomes are assessed in isolation this would be best based on the product created by candidates.

The completed sequence(s) are not required to be narrative, and could be generated in response to a range of different briefs and or criteria, including but not limited to special effects for live action, music and commercial promos, time based art, narrative and non narrative animation, title sequences, interactive menus, multimedia productions for television, film, and digital content provision.

Higher National Unit specification: support notes (cont)

Unit title: Compositing and Motion Graphics Advanced

Source material utilised by the candidate for the final sequence can include a broad range of digital or digitised files. This includes but is by no means limited to, video or digitised film footage, digital photographs, scanned images, collages, and other material converted to digital image formats.

While it is envisaged that the candidate will have substantial involvement in the creation of the original source material, this Unit could be assessed using source material provided by the delivery centre, providing that the degree of manipulation is the composite sequence fulfils the requirements of the Evidence Requirements.

Opportunities for developing Core Skills

The delivery and assessment of this Unit may offer the opportunity to develop Core Skills in 'Written Communication' at SCQF level 6. In particular this development would be appropriate if a report is used as the Instrument of Assessment for Outcomes 1 and 3. The general skill for this component is 'Produce well-structured written communication.'

The delivery and assessment of this Unit may offer the opportunity to develop the Core Skill of Information Technology at SCQF level 6. The technical processes of collating, and organising source material, and the additional in-depth processes involved in the encoding and archiving digital files in Outcome 2 are appropriate for the development of this Core Skill. The general skill for this component is 'Using an IT system effectively and responsibly to process a range of information'.

These skills can be developed through formative activities, such as experimental encodings, or through preparing source material, without being formally assessed for certification of Core Skill.

The delivery and assessment of this Unit may also contribute towards the component 'Planning and Organising' of the Core Skill Problem Solving at SCQF level 6 because of the requirement to devise and implement an encoding strategy in the assessment for Outcomes 1 and 2. The general skill for this component is 'Plan, organise and complete a complex task'.

Specific skills which could be developed are:

♦ developing a plan
♦ identifying and obtain resources to carry out the plan
♦ carrying out the task

The delivery and assessment of this Unit may offer the opportunity to develop the component 'Critical Thinking' of the Core Skill Problem Solving at SCQF level 6 because of the requirement to evaluate and select appropriate encoding formats and codecs in the teaching and assessment requirements of Outcome 1. The general skill for this component is to 'Identify and assess the relevance of the factors involved in a situation/issue and to develop and justify an approach to deal with this situation/issue'.

In both formative and summative assessment the candidate should be encouraged to link appropriate encoding formats to the selected digital delivery platform.

Higher National Unit specification: support notes (cont)

Unit title: Compositing and Motion Graphics Advanced

Specific skills which could be developed are:

♦   identifying the strengths and weaknesses of all stages of the problem solving strategy — ie analysing the situation, planning and organising the task and the Outcome of the activity
♦   referring to evidence on aspects of the strategy such as whether all factors were
♦   identified; effectiveness of the strategy and planning; suitability of resources; or
♦   appropriateness of the Outcome
♦   drawing a conclusion — this should refer to and consider the evidence. The conclusion might involve suggesting an alternative or modification to the strategy or plan, making a prediction or a generalisation

Open learning

This Unit could be delivered by distance learning provided opportunities to ensure appropriate mentoring of candidate progress. It may be appropriate under the circumstances that distance-learning candidates engage in the single integrated assessment option rather than the Outcome-by-Outcome assessment. It may also be necessary to consider assessment of the final audio-visual submission supported by questioning of the candidate.

Candidates with disabilities and/or additional support needs

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. Further advice can be found in the SQA document *Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs* (**www.sqa.org.uk**).

General information for candidates

Unit title: Compositing and Motion Graphics Advanced

The Unit is designed to provide you with the knowledge and/or skills necessary to create complex motion graphics or composited sequences for a range of programme types and visual contexts. You will be given a brief which will enable you to plan, present, create and deliver a complex visual sequence which could include video and film footage, still images, typography, and other graphic elements.

The Unit concentrates on the following elements:

1　Pre-visualise a complex motion graphics sequence.
2　Create a complex motion graphics sequence.
3　Render and evaluate a complex motion graphics sequence.

Outcome 1 asks you to plan and prepare pre-visualisation materials to fulfil a given brief. Once your brief has been set and agreed, you must then produce a storyboard or visual materials, which illustrate your proposed sequence.

In Outcome 2 you will be asked to select and manipulate audio and visual material to create a sequence (or sequences) using a range of motion graphics and compositing techniques with a total minimum duration of 30 seconds. Software and hardware tools and processes should be used to digitise the material which you have selected to form the basis of your sequence. To successfully complete this Outcome you will need to demonstrate your ability to use the compositing and motion graphics techniques listed below to produce a complex sequence which reflects the given brief.

♦ Opacity
♦ Keyframing
♦ Image or object transformations such as scale, rotation, skew and perspective
♦ Masking or Garbage Mattes
♦ Alpha channels
♦ Layering or Multiple image techniques
♦ Motion typography
♦ Blending OR Transfer modes
♦ Time Remapping
♦ Stylistic and Visual Effect manipulation
♦ Keying (Chroma keying, Luma keying, Difference Keying)
♦ Matting (Track Matting)
♦ Colour Correction OR Colour Matching
♦ Incorporation of 3d elements
♦ Rotoscoping OR Frame Painting

General information for candidates (cont)

Unit title: Compositing and Motion Graphics Advanced

In Outcome 3 you will be asked to render or output the final sequence and archive it to an appropriate storage medium. You must then produce an evaluation report of the final sequence which refers to and analyses the following areas:

♦ the similarities or differences of the pre-visualisation (Outcome 1) to the final sequence
♦ the image quality of the final rendered sequence
♦ the audio quality of the final rendered sequence
♦ the logic or reasoning behind at least one creative or technical element within the sequence
♦ draw a conclusion — this should refer to and consider the final sequence. The conclusion might involve suggesting an alternative technique or modification to the sequence

In order to complete this Unit successfully, you will be required to achieve a satisfactory level of performance in all Outcomes.