SCOTTISH QUALIFICATIONS AUTHORITY

Higher National Unit Specification

General information for centres

Unit title: Advanced Vector Graphics for Creative Multimedia Design

Unit code: DE2R 35

Unit purpose: This Unit is designed to provide candidates with the knowledge and/or skills necessary to produce advanced vector graphics for a design brief. The main activities in the Unit are aimed at creating design solutions with the skills providing the tools for the candidate to fully express their creative thinking. Other activities highlight organisational skills and the preparation of materials for incorporation into a larger project.

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

1. Prepare creative solutions for implementation using a vector drawing package.
2. Produce designs using vector graphics.
3. Use advanced operations of a vector drawing package.
4. Control colour and graphic elements in a design solution.

Credit value: 2 HN Credits at SCQF level 8: (16 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 beneficial if candidates were proficient in computer use and saving files in a methodical way. Candidates should have a basic understanding of the manipulation of vector graphics and the planning process for producing design solutions within the constraints of a design brief. This may be evidenced by the possession of relevant National Units, HN units or experience. Higher Art and Design and/or Craft Design and Technology would provide useful background knowledge but are not essential to success in this Unit. It is recommended that candidates have completed HN Unit, DE2W 34 Graphics for Creative Multimedia Design, or similar, prior to commencement of this Unit.

Core skills: There may be opportunities to gather evidence towards core skills in this Unit, although there is no automatic certification of core skills or core skills components.

Higher National Unit Specification

General information for centres (cont)

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. The most appropriate approach to delivery is one that requires candidates to integrate all knowledge and/or skills for the unit to create a design solution to a given brief. The assessor could act as the client for the finished design or opportunities could be taken to work with external clients. In both cases candidates should respond to feedback accordingly. The Unit should be delivered as part of a cohesive course, although it can be delivered as a stand alone Unit.

Assessment: This Unit is assessed by means of:

- A report into the subject of the given brief
- A production file containing planning documentation for the design solution
- 2 complete design solutions containing elements of Outcomes 1, 2, 3 and 4.

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

Prepare creative solutions for implementation using a vector drawing package

Knowledge and/or skills

- Research into the subject of a given brief
- Planning of creative solutions to a design brief for implementation using vector drawing software
- Contribution to the decision process to select a final visual for each creative solution

Evidence requirements

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

- A written report of approximately 500 words on the research of the subject matter of the given brief
- The development work for 2 creative solutions in the form of sketches and roughs
- A final visual for each creative solution.

All work must be organised and contained in a production folder.

Assessment guidelines

The assessment of this Outcome should be combined with the other 3 Outcomes by using a design brief that covers all 4 Outcomes. In researching the given brief the candidates should be encouraged to gain a 'feel' for the subject by placing it in the context of a target audience. The candidate should be encouraged to contribute to discussions with the lecturer and their peers concerning the development of creative ideas for themselves and others in the group.

Higher National Unit specification: statement of standards (cont)

Unit title: Advanced Vector Graphics for Creative Multimedia Design

Outcome 2

Produce designs using vector graphics

Knowledge and/or skills

- Shading
- Blending
- Stretching
- Skewing
- Rotating
- Use of guides in design process
- Use of grids in design process

Evidence requirements

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

- Produce vector graphic versions of 2 design solutions incorporating at least 5 editing operations within the parameters of a given brief
- Save vector graphics in relevant formats for a given brief.

All work must be organised and contained in a production folder.

Assessment guidelines

The assessment of this Outcome should be combined with the other 3 Outcomes by using a design brief that covers all 4 Outcomes. It is recommended that the candidate produce vector graphic versions of the design solutions in Outcome 1. This integration should highlight the process of working to a client brief. In producing the vector graphics, candidates should be assessed on the application of all knowledge and/or skills over the entire Outcome. Each element of the outcome need not include all knowledge and/or skills within itself. It is suggested that at least five different advanced editing elements be used across the entire Outcome. The implementation and number of advanced editing elements used beyond this for each design should be driven by the parameters of the given brief.

Higher National Unit specification: statement of standards (cont)

Unit title: Advanced Vector Graphics for Creative Multimedia Design

Outcome 3

Use advanced operations of a vector drawing package

Knowledge and/or skills

- Text manipulation
- Perspective
- Extrusion
- Text to path manipulation
- Blend to path manipulation
- Interaction with other software packages

Evidence requirements

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

- Produce vector graphic versions of 2 design solutions incorporating at least 5 advanced operations of a vector drawing package within the parameters of a given brief
- Save vector graphics in relevant formats for a given brief.

All work must be organised and contained in a production folder.

Assessment guidelines

The assessment of this Outcome should be combined with the other 3 Outcomes by using a design brief that covers all 4 Outcomes. It is recommended that the candidate produce vector graphic versions of the design solutions produced in Outcome 1. This integration should highlight the process of working to a client brief. In using the advanced features of vector graphics, candidates should be assessed on the application of all knowledge and/or skills over the entire outcome. Each element of the outcome need not include all knowledge and/or skills within itself. It is suggested that at least five different advanced editing elements be used across the entire Outcome. The implementation and number of advanced editing elements used beyond this for each design should be driven by the parameters of the given brief.

Higher National Unit specification: statement of standards (cont)

Unit title: Advanced Vector Graphics for Creative Multimedia Design

Outcome 4

Control colour and graphic elements in a design solution

Knowledge and/or skills

- Use of system and custom colour palettes relevant to a given brief
- Advanced control of fill and line in graphic elements

Evidence requirements

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

- Control fills and lines of vector graphics
- Manipulate vector graphics within colour palettes relevant to a given brief
- Save 3 versions of vector graphics showing the development of each
- Save final vector graphic files in a format relevant to the given brief
- Organise file / folder structure incorporating an appropriate file naming convention.

Assessment guidelines

The assessment of this Outcome should be combined with the other 3 Outcomes by using a design brief that covers all 4 Outcomes. Candidates should be encouraged to maintain an effective file/folder structure as they work. This should incorporate an appropriate naming convention. It is suggested that an electronic 'work in progress' portfolio be created showing the stages of development of the vector graphics. This portfolio should be separate from the finished work and itself keep to a naming convention. The created vector graphics should be saved in a format consistent with the delivery mechanism.

Administrative Information

Unit code: DE2R 35

Unit title: Advanced Vector Graphics for Creative Multimedia Design

Superclass category: CE

Date of publication: November 2003

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Higher National Unit specification: support notes

Unit title: Advanced Vector Graphics for Creative Multimedia Design

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 80 hours.

Guidance on the content and context for this Unit

This Unit can be delivered as a stand alone Unit. It would, however, be more beneficial for candidates if it is placed in an integrated context where the final graphics are included in a multimedia project where the delivery mechanism plays a part in the definition of the brief itself. Useful background information can be found in a variety of textbooks which are widely available. Likewise, as well as using software manuals, centres offering this Unit may find additional books useful. There may be helpful tutorials from the World Wide Web although these should be carefully worked through prior to recommending to candidates to ensure their accuracy and that vital elements have not been omitted. Candidates may find it difficult to gauge the complexity of their designs and should rely on the lecturer's judgement [in the capacity of "client"] in deciding what to include in their finished work, so that this is achievable within the time allowed.

Guidance on the delivery and assessment of this Unit

This Unit is practical in nature and should be delivered in a way that reflects the workflow process in industry. The written evidence takes the form of a research report into the subject matter of the brief. Every attempt should be made to place the subject in context by analysing existing work from a similar brief. This should be seen as a means of stimulating the imagination of the student and not in providing the solution itself. The candidate will be asked to create roughs and sketches for two discrete solutions to the design brief. The development steps should be documented in a production file in each case. The production file will be an important part of the assessment evidence. The final visual in each case will then be transferred to an electronic format using a vector graphic software package.

Although candidates should have to become familiar with vector software packages during the delivery of the unit, emphasis should not be placed on software specific skills but rather on the knowledge and skills contained within the Unit. This should ensure that revisions of software does not impact on the underlying knowledge and/or skills acquired through the achievement of the Unit.

Higher National Unit specification: support notes

Unit title: Advanced Vector Graphics for Creative Multimedia Design

Open learning

This Unit could be delivered by open learning provided suitable online materials were developed. There would also have to be a well defined brief which took into account any factors specific to open learning. Feedback from the lecturer and peers could come from the formation of an online group where discussions relevant to the Unit could take place.

If this Unit is delivered by open or distance learning methods, additional planning and resources may be requires for candidate support, assessment and quality assurance. A combination of new and traditional authentication tools may have to be devised for assessment and re-assessment purposes. For further information and advice, please see *Assessment and Quality Assurance for Open and Distance Learning* (SQA, February 2001 - publication code A1030)

Special needs

This Unit specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering special alternative Outcomes for Units. For information on these, please refer to the SQA document *Guidance on Special Assessment Arrangements* (SQA, 2001).

Higher National Unit specification

Unit title: Advanced Vector Graphics for Creative Multimedia Design

General information for candidates

This Unit is designed to enable you to learn about the process of researching a subject for which you are to create a design solution. In working to the given brief you will use the knowledge and skills you acquire in a practical way to produce 2 design solutions in the form of vector graphics. The development of ideas and the input of both lecturer and your peers are an important part of the process. You will use advanced features of vector graphic software for the creation and manipulation of the graphics. The design solutions may be included as part of a multimedia presentation or project.

In Outcome 1 you should learn how to, research into the subject of a given brief, plan creative solutions to a design brief and implement your plan using vector drawing software and contribute to the decision making process to select a final visual for each creative solution. In order to achieve a pass in Outcome 1 you will need to produce: a written report of approximately 500 words on the research of the subject matter of the given brief; the development work for 2 creative solutions in the form of sketches and roughs; and a final visual for each creative solution.

In Outcome 2 you should learn how to use various techniques used in the production of vector graphics, such as, shading, blending, stretching, skewing, rotating, guides, and grids. In order to achieve a pass in Outcome 2 you will need to: produce vector graphic versions of 2 design solutions and save vector graphics in relevant formats for a given brief.

In Outcome 3 you should learn how to use various advanced features in the production of vector graphics, such as, text manipulation, perspective, extrusion, text to path manipulation, blend to path manipulation, interaction with other software packages. In order to achieve a pass in Outcome 3 you will need to: produce vector graphic versions of 2 design solutions incorporating at least 5 advanced operations of a vector drawing package within the parameters of a given brief and save vector graphics in relevant formats for a given brief.

In Outcome 4 you should learn about the control of fill and line in graphic elements and how to use custom colour palettes relevant to a given brief. In order to achieve a pass in Outcome 4 you will need to: control fills and lines of vector graphics; manipulate vector graphics within colour palettes relevant to a given brief; save 3 versions of vector graphics showing the development of each; save final vector graphic files in a format relevant to the given brief; and organise your file / folder structure incorporating an appropriate file naming convention.

By the end of this Unit you should be able to:

- Prepare creative solutions for implementation using a vector drawing package
- Produce designs using vector graphics
- Use advanced operations of a vector drawing package
- Control colour and graphic elements in a design solution.