

Higher National Unit Specification

General information for centres

Unit title: 2D Computer Animation for Visual Communication: Advanced

Unit code: DX3D 36

Unit purpose: The Unit is designed to extend candidates' knowledge and skills involved in the design and production of a 2D computer animation to an advanced level. This Unit would be suitable for candidates wishing to develop advanced competence in the design, creation and production of animation for various applications.

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

- 1 Identify the principles of current interactive animation techniques.
- 2 Use computer applications to create advanced interactive animation elements.
- 3 Incorporate sound in an interactive animated presentation.
- 4 Create an advanced interactive screen based animated presentation to meet the requirements of a brief/s.

Credit points and level: 2 HN Credits at SCQF level 9: (16 SCQF credit points at SCQF level 9*).

**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. It would be beneficial if the candidate had good practical drawing skills and a substantial knowledge of computer applications, screen-based presentation applications and animation presentations. This could be evidenced by the possession of the following HN Units: DV5N 35 2D Computer Animation; DX33 35 Digital Imaging Project.

Core Skills: There are opportunities to develop the Core Skills of Information Technology and Communication 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: The assessment of Outcome 1 could be a single assessment, or it would be possible, if desired, to break this assessment down into separate assessment parts, both undertaken in supervised conditions.

General information for centres (cont)

Candidates should be given all the necessary information to enable them to source relevant information, to produce a report or respond to a questionnaire.

The assessments of Outcome 2, 3 and 4 may be combined, if desired.

A checklist may be used to evaluate the candidate's pass criteria and completion of each part of the requirements for knowledge and/or skills, stated above.

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

Identify the principles of current interactive animation techniques

Knowledge and/or skills

- ◆ User interfaces
- ◆ Interactive animation
- ◆ Storyboard or site plan structures
- ◆ Navigation techniques

Evidence Requirements

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

- ◆ research and analyse the principles of current interactive animation techniques
- ◆ compile a written report identifying the principles (900 words minimum)
- ◆ collate practical examples which exemplify the principles described within the report

Candidates must provide evidence of research into all items stated above and it should be presented in the form of a research file.

Assessment guidelines

The assessment of Outcome 1 could be a single assessment, or it would be possible, if desired, to break this assessment down into separate assessment parts, both undertaken in supervised conditions. The research file with all the collated evidence can be electronic or paper based. The research should include visual examples and be collated for reference.

Candidates should be given all the necessary information to enable them to source relevant information, to produce a report or respond to a questionnaire

Higher National Unit specification: statement of standards (cont)

Unit title: 2D Computer Animation for Visual Communication: Advanced

Outcome 2

Use computer applications to create advanced interactive animation elements

Knowledge and/or skills

- ◆ Storyboard or site plan
- ◆ User interface
- ◆ Navigational objects
- ◆ Animation objects
- ◆ Scripting techniques
- ◆ Interactive techniques

Evidence Requirements

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

- ◆ create and develop a storyboard or site plan for animation navigation, prior to working within a computer program
- ◆ create an advanced user interface with all the appropriate navigation elements and objects
- ◆ draw advanced animation objects within a computer-based program
- ◆ apply advanced scripting techniques to demonstrate accurate navigation interactivity between sequences
- ◆ produce and submit a minimum of four short interactive animated sequences to an advanced level

Assessment guidelines

The assessment of this Outcome may be combined with Outcome 3 and 4.

A checklist should also be used to evaluate the above evidence.

Outcome 3

Incorporate sound in an interactive animated presentation

Knowledge and/or skills

- ◆ Sound files
- ◆ Sourcing sound file formats
- ◆ Importing of sound files
- ◆ Incorporating sound
- ◆ Synchronising sound

Higher National Unit specification: statement of standards (cont)

Unit title: 2D Computer Animation for Visual Communication: Advanced

Evidence Requirements

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

- ◆ create sound files or source copyright free sound files
- ◆ import the correct sound file formats
- ◆ incorporate the sound files into an animated presentation
- ◆ synchronise the sound files correctly

Assessment guidelines

The assessment of this Outcome may be distinct, or combined with Outcome 2 and 4. The candidate could display an understanding of sourcing or creating the correct sound files to be incorporated in to an advanced interactive animated presentation. The candidate should understand how to import and incorporate the sound with the use of correct synchronising techniques.

This Outcome will be assessed by the creation of sound or sourcing of copyright sound files, correctly formatted and incorporated for an interactive animated presentation. The sound files will be correctly synchronised within sequences, with navigational elements, with objects and throughout the presentation.

A checklist should be used to evaluate the candidate's work.

Outcome 4

Create an advanced interactive screen based animated presentation to meet the requirements of a brief

Knowledge and/or skills

- ◆ Interpretation of brief
- ◆ Interactive animation sequences
- ◆ Presentation
- ◆ File formats

Evidence Requirements

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

- ◆ plan the interactive animation correctly by use of navigation techniques
- ◆ correctly construct and implement appropriate interactive environment
- ◆ clearly define navigation and interaction between sequences
- ◆ save the final animation to the correct file format

All the above points will be in response to an advanced project brief/s.

This Outcome will be assessed by the presentation of a completed advanced interactive animated presentation, lasting a minimum of 30 seconds, saved to a specified format.

Higher National Unit specification: statement of standards (cont)

Unit title: 2D Computer Animation for Visual Communication: Advanced

Assessment guidelines

The assessment of this Outcome may be combined with Outcome 2 and 3. The candidate should display an understanding of advanced design creativity, navigation and interactive animation techniques, by experimenting with a wide range of appropriate software elements.

It is also recommended that candidates adhere to self-imposed deadlines throughout the duration of the brief. This would demonstrate good project management skills

A checklist should be used to evaluate the candidate's work.

Administrative Information

Unit code: DX3D 36

Unit title: 2D Computer Animation for Visual Communication: Advanced

Superclass category: CE

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Higher National Unit specification: support notes

Unit title: 2D Computer Animation for Visual Communication: 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 80 hours.

Guidance on the content and context for this Unit

The Unit is designed to extend candidates' knowledge and skills involved in the design and production of a 2D computer animation to an advanced level. This Unit would be suitable for candidates wishing to develop advanced competence in the design, creation and production of animation for various applications. The Unit should encourage realistic workplace practices and work standards, using industry standard hardware and software. Evidence requirements are the minimum standards for assessment and should not exclude lecturers from using current features as software and animation techniques evolve.

Guidance on the delivery and assessment of this Unit

Whilst this is an optional unit within the HND Visual Communication Group Award, opportunities may be taken to link with other aspects of the course and a thematic approach adopted for both delivery and assessment.

Outcome 1

Candidates should be provided with information on the basic principles of user interfaces, navigation techniques and interactivity for animation. Internet and library facilities should be made available for sourcing current techniques used in the design and production of interactive animations. The research will include visual examples and be collated for reference, which will assist the candidate in the creation of a storyboard or site plan for an interactive animation.

A clear explanation or visual demonstration of the hierarchical structures of site plans and the creation of storyboards, will assist the candidate in understanding these fundamental principles in the building of an interactive animation. Visual examples of user interfaces and navigation techniques within interactive animations will enable students to understand human computer interaction.

Outcome 2

Candidates should be provided with visual examples of storyboards or site plans and time allowed in their creation, prior to computer animation. A clear explanation with visual demonstration of navigation elements and scripting techniques will assist the candidate in understanding the principles of interactivity in an animation.

Internet and library facilities should be made available for sourcing current user interface styles and interactive animation techniques. These examples should assist the candidate in creating user interfaces, navigation elements and special scripting techniques incorporated in the production of an animation.

Higher National Unit specification: support notes (cont)

Unit title: 2D Computer Animation for Visual Communication: Advanced

Outcome 3

Candidates should be provided with information on the basic principles of sourcing copyright free sound files or creating their own sounds, to be incorporated in an animation. Internet and library facilities should be made available for sourcing copyright free sounds, or relevant equipment in the production of sound files.

Candidates should be provided with a clear explanation and a list of the correct sound files that can be imported into the relevant software programs. Also information should be given on how to format them before incorporating them into an animation.

A visual demonstration with a clear explanation of how to synchronise the sound files correctly within sequences, with navigational elements, with objects and throughout the presentation. This will enable the candidate to use sound correctly within an interactive animation and understand how to synchronise sound to animated objects, ie *lip-synching*.

Outcome 4

The brief should encourage the candidate to be creative and include a range of interactive animation techniques as appropriate.

In order to enhance the candidate's understanding, a clear explanation and visual demonstration of the basic navigation techniques and interaction within an animation should be given.

The brief should clearly state which software programs should be used for design and production of the interactive animation. The final presentation will be accurately tested and saved to the correct format. Information should be supplied on file formats and extensions.

Candidates could scan their own graphics, or create them in various software drawing programs, incorporate text or copyright free graphics and sound files obtained from internet facilities, a CD-ROM and other electronic sources.

The use of a checklist throughout all these outcomes will enable the tutor to evaluate the researched evidence, storyboard or site plan, correct sound files, creation of navigation elements and techniques and production of an interactive animation.

Opportunities for developing Core Skills

Skills in accessing and evaluating electronic sources which provide an effective source of current complex information on the basic principles and mechanical concepts of paper and cell animation as well as professional concerns, issues and ideas will be developed, in order that candidates are able to read in depth and in detail current reference materials from a range of Internet sites. Checklists to support analytical evaluation of information accessed could include criteria to ensure a check on the currency, authority, accuracy, and balance of all information to be used.

Higher National Unit specification: support notes (cont)

Unit title: 2D Computer Animation for Visual Communication: Advanced

Demonstration by the assessor of the correct use of animation techniques and construction principles will assist the development of technical skills. There should be formative opportunities for candidates to scan their own graphics, or create them in separate drawing programs, and select and import text or graphics obtained from electronic sources. Focus on the presentation of materials appropriate to identified purpose and audience should assure the impact and effectiveness of animation sequences and enhance communication skills.

Open learning

This Unit would be suited to open, distance and online learning if it was conducted in conditions where arrangements have been put in place to assure the authenticity of the candidate's work: assessments could, for example, be verified by a professional person who can confirm that the work was done solely by the candidate. For further information and advice please refer to the SQA document *Assessment and Quality Assurance for Open and Distance Learning* which is available on SQA's website: www.sqa.org.uk.

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. 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: 2D Computer Animation for Visual Communication: Advanced

The Unit will give you an advanced knowledge and the skills required to design and production of a 2D computer animation. You will also develop a greater competence in the design, creation and production of animation for various applications.

Outcome 1

For this Outcome you will understand the principles of user interfaces design and navigation techniques for an interactive animation. You will also learn about the important use of storyboards and hierarchical structures of site plans for the design and production of an interactive animation.

Outcome 2

For this Outcome you will understand the principles of creating a storyboard or site plan for interactive navigation, prior to working within a computer program. Also how to create a user interface with all the appropriate navigation elements and objects and apply scripting techniques for interactivity between sequences.

Outcome 3

For this Outcome you will understand the principles of creating your own sound files or sourcing copyright free sound files. You will correctly formatted and imported these sound files within an interactive animated presentation and correctly synchronise them sequences, with navigational elements, with objects and throughout your presentation.

Outcome 4

For this Outcome you will be provided with a production brief/s. You will design and construct a two dimensional interactive animation, incorporating sound, within a current software program. It will be accurately tested and saved to the correct format for the specified application/s.