



Higher National Graded Unit specification

General information for centres

This Graded Unit has been validated as part of the HND 3D Computer Animation. Centres are required to develop the assessment instrument in accordance with this validated specification. Centres wishing to use another type of Graded Unit or assessment instrument are required to submit proposals detailing the justification for change for validation.

Graded Unit title: 3D Computer Animation: Graded Unit 2

Graded Unit code: F7FE 35

Type of Graded Unit: Project

Assessment Instrument: Practical Assignment

Credit points and level: 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.*

Purpose: This Graded Unit is designed to provide evidence that the candidate has achieved the following principal aims of the HND 3D Computer Animation:

- ◆ develop knowledge, understanding and contemporary vocational skills within the context of 3D Computer Animation at SCQF level 8
- ◆ develop a range of Communication and Information Technology knowledge and skills relevant to the need of 3D Animation specialists at SCQF level 6
- ◆ develop skills for preferred employment or further study
- ◆ develop specialist technical skills and knowledge
- ◆ conduct independent project work involving the integration and application of a variety of skills within a determined time scale
- ◆ develop an awareness of ethical and professional issues
- ◆ develop professional standards and production values
- ◆ develop an understanding of interdisciplinary connections between specialist areas
- ◆ develop project management skills which enable candidates to conduct independent project work involving the integration and application of a variety of 3D computer animation and design skills within a determined time scale
- ◆ develop skills, knowledge and motivation towards progression to higher education routes

General information for centres (cont)

Specific aims:

- ◆ develop skills and prepare candidates for employment as 3D Animators, working with a range of associated professional disciplines
- ◆ develop and build on previous learning and transferable skills
- ◆ develop candidates' responsibility for independent learning
- ◆ develop candidates' resource management skills
- ◆ prepare candidates with a range of the most contemporary vocational skills, including the preparation, co-ordination and communication of technical information relevant to the 3D Animation industry, using the most advanced IT platforms available
- ◆ prepare candidates with underpinning knowledge and skills contributing to the efficient operation and management of 3D Animation projects through control of specified regulatory, quality or management standards

Recommended prior knowledge and skills: It is recommended that the candidate should have completed or be in the process of completing the following Units relating to the above specific aims prior to undertaking this Graded Unit:

F7EV 35	<i>3D Computer Animation: Character Modelling Advanced</i>
F564 35	<i>3D Computer Animation: Movement Studies Advanced</i>
F562 34	<i>3D Computer Animation: Surface Texturing and Shading</i>
F563 34	<i>3D Animation: Special Effects</i>
DW9K 34	<i>Compositing and Motion Graphics</i>
F6B6 35	<i>Showreel Portfolio and Curriculum Vitae Creation</i>

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

Assessment: This Graded Unit will be assessed by the use of Practical Assignment. The developed Practical Assignment should provide the candidate with the opportunity to produce evidence that demonstrates she/he has met the aims of the Graded Unit that it covers.

Administrative Information

Graded Unit code: F7FE 35

Graded Unit title: 3D Computer Animation: Graded Unit 2

Original date of publication: August 2009

Version: 01

History of changes:

Version	Description of change	Date

Source: SQA

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Higher National Graded Unit specification: instructions for designing the assessment task and assessing candidates

Graded Unit title: 3D Computer Animation: Graded Unit 2

Conditions of assessment

The candidate should be given a date for completion of the Practical Assignment. However, the instructions for the assessment task should be distributed to allow the candidate sufficient time to assimilate the details and carry out the assessment task. During the time between the distribution of the assessment task instructions and the completion date, assessors may answer questions; provide clarification, guidance and reasonable assistance. The assessment task should be marked as soon as possible after the completion date. The final grading given should reflect the quality of the candidate's evidence at the time of the completion date.

The evidence for the project is generated over time and involves three distinct stages where each stage has to be achieved before the next is undertaken. Thus any re-assessment of stages must be undertaken before proceeding to the next stage.

If a candidate fails the project overall or wishes to upgrade, then this must be done using a *substantially different* project, ie all stages are undertaken using a new project, assignment, case study, etc. In this case, a candidate's grade will be based on the achievement in the re-assessment, if this results in a higher grade.

Instructions for designing the assessment task

The assessment task is a project. The project undertaken by the candidate must be a complex task which involves:

- ◆ creativity
- ◆ variables which are complex or unfamiliar
- ◆ relationships which need to be clarified
- ◆ a context which may be familiar or unfamiliar to the candidate

The assessment task must require the candidate to:

- ◆ analyse the task and decide on a course of action for undertaking the project
- ◆ identify the client and user requirements for the project
- ◆ analyse possible solutions to the problems set in the project
- ◆ plan and organise work and carry it through to completion
- ◆ reflect on what has been done and draw conclusions for the future
- ◆ produce evidence of meeting the aims which this Graded Unit has been designed to cover

Higher National Graded Unit specification: instructions for designing the assessment task and assessing candidates (cont)

The project must involve a practical assignment culminating in a finished product and candidates must demonstrate the application of the skills and knowledge that fall within the context of 3D Computer Animation. This assessment instrument is not concerned exclusively with practical activity — candidates are provided with a brief that allows them to prepare, plan and demonstrate creative skills.

The candidate will be asked to:

- ◆ interpret a brief
- ◆ gather information in response to the brief
- ◆ demonstrate the ability to integrate research into creative design solutions
- ◆ produce a product in response to the brief
- ◆ evaluate the product

The practical assignment and the way it is planned should ensure candidates undertake individual research and investigation in relation to the given brief. The brief should create opportunities for the candidate to express and develop their own creativity.

The most appropriate approach to the project is one that requires candidates to integrate skills to produce a creative solution to a given brief. The candidate should be asked to research, consider and develop creative solutions to produce a finished product.

Each candidate must provide his or her individual responses to the given brief and assessors must be satisfied that the work has been completed by the individual candidate. This should be presented in the form of a structured annotated sketch book, log book, storyboard or 3D equivalent.

As part of the developmental stage the candidate should give a simulated client presentation.

The range of tasks undertaken by candidates should be defined in relation to the original brief criteria and be focused on the response required at the various stages across the timeline of the project activity. The analysis and synthesis of the project should allow the candidates to demonstrate valid, realistic and interesting responses to the needs of the brief. The candidate is required to produce the following evidence types:

- ◆ a timeline action planning document
- ◆ a project brief response document
- ◆ log/sketch book recordings
- ◆ responses to questioning about the authenticity of the solutions
- ◆ evaluation of the candidate's solutions against the action planning document and the project brief specification
- ◆ present final solutions to the lecturer

Higher National Graded Unit specification: instructions for designing the assessment task and assessing candidates (cont)

Guidance on grading candidates

Candidates who meet the minimum Evidence Requirements will have their achievement graded as C — competent, or A — highly competent or B somewhere between A and C. The grade related criteria to be used to judge candidate performance for this Graded Unit is specified in the following table.

Grade A	Grade C
<p>Is a seamless, coherent piece of work which:</p> <ul style="list-style-type: none"> ◆ shows sophisticated research approaches ◆ shows critical and evaluative approaches ◆ shows strategic thinking ◆ evidences exceptional technical skills ◆ contains detailed project planning ◆ provides an insightful solution to brief ◆ shows refinement and originality of creative expression ◆ shows heightened awareness of industrial procedures ◆ has high visual impact ◆ evidences effective time management ◆ shows a very high level of engagement with project 	<p>Is a co-ordinated piece of work which:</p> <ul style="list-style-type: none"> ◆ shows adequate research approaches ◆ shows an analysis of key factors ◆ shows ability to identify problems ◆ evidences practical competence ◆ contains project planning ◆ provides an adequate solution to brief ◆ shows gestural creative expression ◆ shows satisfactory awareness of industrial procedures ◆ shows presentation skills ◆ evidences guided time management ◆ shows a minimal level of engagement with project

Candidates should work independently and where an A grade is awarded, then a sophisticated approach to research would be exhibited by making use of a variety of research sources such as the World Wide Web, a variety of books, magazines and articles relevant to the chosen project. Research at this level would also be well planned and show clear results in line with project.

The project will be marked out of 100. Assessors will mark each stage of the project, taking into account the criteria outlined. The marks will then be aggregated to arrive at an overall mark for the project. Assessors will then assign an overall grade to the candidate for this Graded Unit based on the following grade boundaries.

A = 70% — 100%
 B = 60% — 69%
 C = 50% — 59%

Note: the candidate must achieve all of the minimum evidence specified below for each stage of the project in order to achieve the Graded Unit.

Higher National Graded Unit specification: instructions for designing the assessment task and assessing candidates (cont)

Evidence Requirements

The project consists of three stages: planning; developing and evaluating. The following table specifies the minimum evidence required to pass each stage.

Note: The candidate must achieve **all of the minimum evidence** specified below for each stage of the project in order to pass the Graded Unit.

Project stage	Minimum Evidence Requirements
Stage 1 — Planning 15%	<p>An Action Plan which must contain:</p> <ul style="list-style-type: none">◆ The candidate's interpretation of the brief with evidence of analysing what is involved in the project, ie identification of the key factors influencing the project and how they relate to one another and their relative importance.◆ Aims of the practical assignment.◆ Identification of materials and resources and how they will be accessed, ie sources of information, procedures to be followed, equipment used and approach to be taken.◆ Project overview and schedule. <p><i>The candidate must achieve all of the minimum evidence specified above in order to pass the Planning stage.</i></p>

Higher National Graded Unit specification: instructions for designing the assessment task and assessing candidates (cont)

Project stage	Minimum Evidence Requirements
Stage 2 — Developing 75%	<p>Developing Creative Solutions into a Finished 3D Animation</p> <p>The Development stage must include the following:</p> <ul style="list-style-type: none"> ◆ Design techniques, ie 2D and/or 3D sketch design, thumbnails, roughs, storyboard must be produced as design documentation within the project ◆ Demonstrates the ability to integrate research into a finished product ◆ The completed product ◆ Demonstrates focus, concentration and confidence in the client presentation ◆ Responds appropriately when presenting work ◆ Information gathered in response to the brief, ie research evidence which demonstrates knowledge of current trends and developments in the profession ◆ Investigation into possible alternative solutions ◆ Analyse the requirements and their implications ◆ Review and update the action plan in the light of the experience ◆ Identify and gather appropriate evidence, comparisons and market research ◆ Include references to any modifications during the course of the project or alternative approaches considered <p>A record of the process underpinning the activity must be contained in an annotated sketch book or log book which must consist of the following:</p> <ul style="list-style-type: none"> ◆ The action plan ◆ Research and development ◆ Documentation of the design process ◆ Alternative design solutions ◆ Mentoring feedback <p><i>The candidate must achieve all of the minimum evidence specified above in order to pass the Developing stage.</i></p>

Higher National Graded Unit specification: instructions for designing the assessment task and assessing candidates (cont)

Project stage	Minimum Evidence Requirements
Stage 3 — Evaluating 10%	<p>The evaluation report must:</p> <ul style="list-style-type: none"> ◆ Briefly outline the practical assignment ◆ Identify any knowledge and skills which have been gained or developed ◆ Analyse the use of 3D and 2D elements ◆ Identify strategies for development ◆ Analyse skills in presenting to a client <p>The evaluation stage must focus on the effectiveness of the approach taken by the candidate and include references to all stages of the activity from:</p> <ul style="list-style-type: none"> ◆ Analysis of the brief ◆ Planning and organisation of the project ◆ Carrying the project through to completion and ◆ The outcome of the project <p>Candidates must:</p> <ul style="list-style-type: none"> ◆ Identify the criteria on which to base the evaluation ◆ Explain the relevance of the evidence and its effectiveness to the project ◆ Include conclusions as to how the project could be improved with evidence to support conclusions drawn ◆ Include recommendations with justifications <p><i>The candidate must achieve all of the minimum evidence specified above in order to pass the Evaluating stage.</i></p>

Higher National Graded Unit specification: instructions for designing the assessment task and assessing candidates (cont)

Support notes

Delivery of the Graded Unit may vary depending on individual college academic calendars. It is envisaged that this Graded Unit may be started approximately half way through the candidate's studies, with an increasing amount of the time available for the Graded Unit being spent towards the end of the course. It is not intended that any new knowledge or skills are taught during delivery of the Graded Unit. Instead, the Graded Unit should be used to allow the candidate to demonstrate the integration and application of existing knowledge and skills. The lecturer's time will be spent discussing individual candidate work.

It is envisaged that the Graded Unit 2 will reflect the candidate's skills and the project undertaken will be suited to these skills. A final product is required as the emphasis is on the application of the candidates skills. This helps to ensure that candidates choosing differing projects have equal opportunity to succeed in this Unit.

As this Unit is candidate initiated and candidate driven, it requires only guidance and direction on the part of the lecturer. Primarily, the role of lecturer is that of mentor. The expectation is that the candidate works independently in a creative, expressive and professional manner, displaying time management skills in order to secure successful completion of the Unit.

Time management is an important aspect of planning, developing and evaluating a practical activity. In order to help candidates manage their time effectively, lecturers should consider setting up individual progress reviews with candidates at the start of the Unit delivery time. Lecturers may consider developing a centre pro-forma to record their discussions with candidates. These discussions or mentoring activities are an essential part of the Graded Unit and should help ensure that candidates keep to timelines and should be included in their production file.

The Grade finally achieved by the candidate depends on the work submitted. It is therefore very important that staff do not give undue assistance to candidates. The level of assistance should be fully discussed at Course Team level and any assistance given should be logged in the candidate's mentoring records.

The amount of time spent planning the project at this stage is seen as critical to the development of skills which are genuinely transferable in the Animation and Film industries. Part of the planning will require the candidates to negotiate use of 3D Animation technology and facilities. Candidates must also be able to co-operate with others in the class group. It is essential that the majority of the delivery takes place in a computer laboratory setting; lecturers should try to ensure that a flexible approach is taken, towards ensuring adequate accommodation and resources are available to candidates. Access to computers is required throughout the Graded Unit.

Disabled candidates and/or those with additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website www.sqa.org.uk/assessmentarrangements

General information for candidates

This Unit has been designed to help you achieve the principal aims of the HND 3D Computer Animation award and to assess your knowledge and skills relative to the mandatory subjects of the course framework. This will be achieved typically by the resolution of a project brief, allowing you to explore a range of solutions, arrive at an appropriate and effective resolution and communicate the solutions in an effective manner.

The Unit will be taught with your Lecturer in the role of facilitator and, at times, engaging you as a professional routinely involved in a 3D Animation project.

There are three distinct phases to the project, Planning, Developing and Evaluating, worth respectively 15%, 75% and 10% of the total marks awarded for the Unit. In the Planning stage of the Project, you will be expected to consider the nature of the project, including factors related to a wide variety of aesthetic, administrative and technical constraints, and in response to these, prepare an Action Plan and a Project Brief setting the parameters of the Project.

In the Developing stage of the Project you will be expected to adhere to the Action Plan, explore and consider possible solutions and using computer aided technological approaches, arrive at an appropriate design solution for the Project Brief set. The solutions will be communicated visually, pictorially and in hard copy format and substantiated by clear support documentation, including the rationale for the solutions reached.

In the Evaluating stage of the Project you will be expected to consider the success and efficacy of your solution, providing a presentation of your final solutions and recommendations, and reflect upon the experience.

The Unit is graded, and this Grade (A–C) quantifies and qualifies the quality of your HND award.

The Unit is largely practical in nature, requiring you to have individual access to a computer workstation. A computer workstation is defined as hardware and software, which will enable an operator to generate (and regenerate) 3D Animations at an acceptable processor speed. A typical minimum hardware configuration would be a current single user PC fitted with suitable peripherals attached such as a printer/plotter to produce hard copies of your work. Alternatively other configurations such as networked workstations are acceptable provided they can satisfy the Unit's criteria.

Additionally, you will have the opportunity within this Unit to develop Core Skills in *Information and Communication Technology*, *Communication* and *Problem Solving*, all at SCQF level 6, as you will be working continuously with 3D Animation workstations and manipulating numerical and graphical data, responding to a project brief, and liaising with external stimuli.