



National Unit specification: general information

Unit title: Animation: Atmospheric Effects (SCQF level 6)

Unit code: FV2W 12

Superclass: CE

Publication date: September 2011

Source: Scottish Qualifications Authority

Version: 01

Summary

This Unit provides candidates with an introductory overview of atmospheric effects which can be created and applied to animation projects. The focus of the Unit is on the provision of underpinning knowledge. However, candidates will have the opportunity to undertake practical activity by generating and evaluating different atmospheric effects, applied to their own animation projects.

Outcomes

- 1 Describe atmospheric effects in relation to 3D animation.
- 2 Create atmospheric effects for inclusion in an animation project.
- 3 Add atmospheric effects to an animation project.
- 4 Evaluate an atmospheric effects animation project.

Recommended entry

While entry is at the discretion of the centre, it would be beneficial if candidates had previously completed SQA Units in Animation at SCQF level 5.

Credit points and level

1 National Unit credit at SCQF level 6: (6 SCQF credit points at SCQF level 6*)

**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.*

National Unit specification: general information (cont)

Unit title: Animation: Atmospheric Effects (SCQF level 6)

Core Skills

Opportunities to develop aspects of Core Skills are highlighted in the Support Notes of this Unit specification.

There is no automatic certification of Core Skills or Core Skill components in this Unit.

National Unit specification: statement of standards

Unit title: Animation: Atmospheric Effects (SCQF level 6)

Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

Outcome 1

Describe atmospheric effects in relation to 3D animation.

Performance Criteria

- (a) Research atmospheric effects associated with 3D animation.
- (b) Describe current atmospheric effects and their importance in relation to animation.
- (c) Describe current techniques used within 3D animation.
- (d) Maintain a detailed record of findings.

Outcome 2

Create atmospheric effects for inclusion in an animation project.

Performance Criteria

- (a) Create atmospheric effects for a 3D animation project.
- (b) Produce still renders.

Outcome 3

Add atmospheric effects to an animation project.

Performance Criteria

- (a) Import atmospheric effects into an animation project.
- (b) Produce still renders.

Outcome 4

Evaluate an atmospheric effects animation project.

Performance Criteria

- (a) Evaluate the effectiveness of atmospheric effects in relation to a given animation project.
- (b) Evaluate the process of the development of the project.

National Unit specification: statement of standards (cont)

Unit title: Animation: Atmospheric Effects (SCQF level 6)

Evidence Requirements for this Unit

Outcome 1

Candidates are required to produce written and/or oral recorded evidence which includes:

- ◆ a description of current atmospheric effects associated with 3D animation
- ◆ a description of the use and importance of atmospheric effects in current 3D animations, to include elemental effects (wind, gravity and force)

Candidates will include evidence that they have researched a variety of materials from a minimum of three sources. Where written evidence is provided the candidate must annotate findings using a log/sketchbook.

Evidence must also include:

- ◆ a description of the current techniques used within a 3D animation
- ◆ a detailed record of all developmental work carried out during the Unit

This Outcome will be conducted under open-book conditions. The assessor must be satisfied that the evidence submitted is the candidate's own work.

Outcome 2

Candidates will provide product evidence which includes:

- ◆ creation of atmospheric effects which includes a minimum of three effects (wind, gravity and light) for a given animation project
- ◆ four still renders of the atmospheric effects produced

This Outcome will be conducted under open-book conditions. The assessor must be satisfied that the evidence submitted is the candidate's own work.

Outcome 3

Candidates are required to provide product evidence which includes:

- ◆ a 3D animation project into which the candidate has imported an atmospheric effect
- ◆ four still renders as product evidence showcasing the atmospheric effects within the 3D animation project

This Outcome will be conducted under open-book conditions. The assessor must be satisfied that the evidence submitted is the candidate's own work.

National Unit specification: statement of standards (cont)

Unit title: Animation: Atmospheric Effects (SCQF level 6)

Outcome 4

Candidates are required to produce written and/or oral recorded evidence which includes:

- ♦ a description and evaluation of the atmospheric effects produced in the given animation project, which includes an evaluation the quality and effectiveness of the atmospheric effects , and details of the process of development (to include planning, acquiring, converting, importing and incorporation)

This Outcome will be conducted under open-book conditions. The assessor must be satisfied that the evidence submitted is the candidate's own work.

National Unit specification: support notes

Unit title: Animation: Atmospheric Effects (SCQF level 6)

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 designed to give the candidate the opportunity to gain knowledge and practice with the fundamental principles required to produce convincing 3D animations. Three dimensional animations require believable atmospheric effects such as wind, gravity and light. These atmospheric effects are crucial for a convincing 3D animation and show the basic emotion or theme that is intended to be conveyed.

Outcome 1

The candidate must research and describe in detail a variety of atmospheric effects required to produce a convincing 3D animation. Three different sources should be used when generating research data on current atmospheric effects used in the animation. Sources could include books, relevant magazines, online resources and commercial video resources. Candidates should research the importance of believable atmospheric effects such as wind, gravity, and light. Candidates may record their findings in a logbook or sketchbook and describe in detail the importance of atmospheric effects in current animation. Candidates should recognise the importance of maintaining a detailed annotated sketchbook/logbook.

Outcome 2

The teacher/lecturer may determine the suitability of any proposed material. The theme of the animation in which the atmospheric effect has to be incorporated can be extracted from existing material/units or provided by the teacher/lecturer. This will allow the candidate to focus on the creation and incorporation of the atmospheric effects.

The candidate must demonstrate their ability to create atmospheric effects for a given animation project. Effects such as wind, gravity, and light are key elements in most convincing animation. Most applications provide functions to create and adapt atmospheric effects and the candidate should demonstrate that they can apply and adapt these preset functions to create the desired atmospheric effect. Still renders are required as product evidence at this stage and should be submitted as rendered images, saved out in suitable formats like JPEG, TIFF, PNG, TGF and Bmp, etc.

This Unit is partially aligned to the National Occupational Standards Units (*Skillset*):

- ◆ ANIM 14 Set Up 3D Elements for Animation
- ◆ ANIM 15 Create 3D Animation

National Unit specification: support notes (cont)

Unit title: Animation: Atmospheric Effects (SCQF level 6)

Outcome 3

Candidates are required to import/merge the created atmospheric effect from Outcome 2 into a given animation project. The candidate will have to set the mood of the scene by adjusting properties of the produced effect to coincide with the current theme/mood of the animation project. Still renders are required as evidence at this stage and should be submitted as rendered images, saved out in suitable formats like JPEG, TIFF, PNG, TGF and Bmp etc.

Outcome 4

Outcome 4 requires candidates to review and evaluate their work. They should be able to describe the effectiveness of the atmospheric effects produced in Outcomes 2 and 3, evaluate the quality of work produced and the processes carried out from planning to incorporation of the atmospheric effect.

Guidance on learning and teaching approaches for this Unit

Outcome 1

Examples of how atmospheric effects can change the overall theme/mood of the any animation scene should be shown as an introduction to the Unit. Basic elements should be covered (gravity, forces, wind, and light) with a main focus on lighting and how it can affect the setting of the scene/mood. Visual examples of how time of day can also affect the way in which lighting can dramatically change the mood of the scene should be shown.

Tutorials/lessons should be produced to demonstrate the need for atmospheric effects that enhance the scene. The main focal point of the lessons would be to show the necessity of the basic environment effects such as gravity, forces, wind, and light to enhance the 3d Scene. Candidates should be allowed time to familiarise themselves with the software's standard features of lighting, colour and intensity.

Outcomes 2 and 3

Outcomes 2 and 3 are practical in nature. Candidates should be reminded of the most effective way in which to produce still renders as evidence using the appropriate assigned renderer installed at the centre delivering the Unit. In Outcome 3 candidates should be shown the correct way of importing/incorporating animation files containing the atmospheric effects produced in Outcome 2. The animation file required for integration can be supplied by the tutor or the candidate's previous course work could be used, allowing the opportunity to harmonise previous work with this Unit.

Outcome 4

The completed evaluation report may include visual illustrations. Where storyboards or logbooks are used to present evidence, the assessor should consult candidates' storyboards and/or project logbooks including evaluation-of source material as this will assist the authentication of evidence.

National Unit specification: support notes (cont)

Unit title: Animation: Atmospheric Effects (SCQF level 6)

Guidance on approaches to assessment for this Unit

Outcome 1

Candidates should be encouraged to use a variety of research source materials to compile a folio of evidence which will include an annotated sketchbook or logbook as a record. They should be made aware of the importance of documenting findings, as knowledge gained through completion of this Outcome contributes directly to fundamental knowledge required to complete Outcomes 2 and 3.

Outcome 2 & 3

Practical project — the candidate could be given a 3D animation project brief to work or a brief may be negotiated and agreed upon by the tutor and candidate.

Outcome 4

The assessment could be in the form of an evaluation report relating to the given animation project for Outcomes 2 and 3. Where storyboards or logbooks are used to present evidence, the assessor should consult candidates' storyboards and/or project logbooks including evaluation of source material as this will assist the authentication of evidence.

Opportunities for the use of e-assessment

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or e-checklists. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)*, *SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.

Opportunities for developing Core Skills

In this Unit candidate will learn about atmospheric effects which can be created and applied to animation projects. Candidates will have an opportunity to undertake practical activity by generating and evaluating different atmospheric effects applied to their own animation projects.

Candidates will:

- ◆ research and describe atmospheric effects and techniques associated with 3D animation
- ◆ record findings in an annotated sketchbook/logbook
- ◆ create atmospheric effects for an 3D animation project
- ◆ produce still renders
- ◆ import atmospheric effects into an animation project
- ◆ evaluate atmospheric effects in relation to the animation project brief

National Unit specification: support notes (cont)

Unit title: Animation: Atmospheric Effects (SCQF level 6)

This means that as candidates are doing this Unit they will be developing aspects of the Core Skills of Problem Solving, Communication and IT.

Elements of the Core Skill of *Problem Solving* should be naturally developed and enhanced as the Unit is completed. Candidates must research and find solutions prior to development of the effect during Outcome 2 and 3, and must apply conclusions from findings to produce the desired atmospheric effect. Critical reflection and consideration of the success of the design solutions could be encouraged in discussion with the assessor in order to reinforce analytical and evaluative approaches to problem solving in working practice.

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

History of changes to Unit

Version	Description of change	Date

© Scottish Qualifications Authority 2011

This publication may be reproduced in whole or in part for educational purposes provided that no profit is derived from reproduction and that, if reproduced in part, the source is acknowledged.

Additional copies of this Unit specification can be purchased from the Scottish Qualifications Authority. Please contact the Business Development and Customer Support team, telephone 0303 333 0330.