



National Unit specification: general information

Unit title: Animation: An Introduction to Lighting (SCQF level 5)

Unit code: FV2N 11

Superclass: KF

Publication date: September 2011

Source: Scottish Qualifications Authority

Version: 02

Summary

This Unit is designed to enable candidates to understand the basic theory of light when used in arts and film, whether traditional or animated. Candidates will learn about types of light sources, the properties of light, such as colour and shadow, and will carry out a lighting study.

The Unit is appropriate for anyone with an interest in animation and arts. It has been developed as part of the National Certificate in Computer Arts and Animation at SCQF level 5 but is also available as a freestanding Unit.

Outcomes

- 1 Describe aspects of light.
- 2 Describe how lighting moods and aesthetics can affect a scene.
- 3 Plan a light study.
- 4 Produce a light study.

Recommended entry

While entry is at the discretion of the centre, candidates would normally be expected to have attained two Standard Grades at general level, or equivalent. Experience of animation and arts would be beneficial, but is not essential.

Credit points and level

1 National Unit credit at SCQF level 5: (6 SCQF credit points at SCQF level 5*)

**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: An Introduction to Lighting (SCQF level 5)

Core Skills

Achievement of this Unit gives automatic certification of the following Core Skills component:

- ◆ Critical Thinking at SCQF level 5
- ◆ Planning and Organising at SCQF level 4

There are also opportunities to develop aspects of Core Skills which are highlighted in the Support Notes of this Unit specification.

National Unit specification: statement of standards

Unit title: Animation: An Introduction to Lighting (SCQF level 5)

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 aspects of light.

Performance Criteria

- (a) Describe the properties of light.
- (b) Describe the properties of light sources.
- (c) Describe the appropriate referencing conventions.

Outcome 2

Describe how lighting moods and aesthetics can affect a scene.

Performance Criteria

- (a) Describe lighting moods.
- (b) Describe lighting aesthetics.
- (c) Provide examples of lighting moods in regular use.
- (d) Provide examples of lighting aesthetics in regular use.

Outcome 3

Plan a light study.

Performance Criteria

- (a) Identify a landmark suitable for a light study.
- (b) Describe the reasons for the choice of landmark.
- (c) Carry out a risk assessment for a visit to the chosen landmark.
- (d) Plan safe visits to the chosen landmark.

Outcome 4

Produce a light study.

Performance Criteria

- (a) Produce photographs of the landmark under varying lighting conditions.
- (b) Produce sketches of the landmark under varying lighting conditions.

National Unit specification: statement of standards (cont)

Unit title: Animation: An Introduction to Lighting (SCQF level 5)

Evidence Requirements for this Unit

Evidence is required which demonstrates that the candidate has achieved the requirements of all of the Outcomes and Performance Criteria.

The evidence produced must be submitted using the candidate's own words. Assessors should assure themselves of the authenticity of candidate's evidence.

For Outcome 1 written and/or oral recorded evidence is required, gathered under supervised, open-book conditions, in the form of:

- ◆ description of the properties of light to include shadow, colour, and intensity
- ◆ description of the choices of light sources, to include bulb type, source, fittings
- ◆ description of the appropriate referencing conventions and unit system used to measure light, to include Kelvin, Wattage and Candelas

For Outcome 2 written and/or oral recorded evidence is required, gathered under supervised, open-book conditions, in the form of:

- ◆ description of the use of lighting to generate a minimum of three mood and aesthetic feelings to a scene. This will include how light is shown in an art medium, how art is lit to enhance the work and how merchandise is lit in shops to entice customers to buy
- ◆ description and examples of how light source and moods and aesthetics are used generally, to include reference to one of the following: art, media, product placement, working conditions

For Outcome 3 written and/or oral recorded evidence is required, gathered under open-book conditions, in the form of:

- ◆ description of the landmark and a minimum of two reasons for its choice in terms of how the light sources are interesting or cause interesting effects
- ◆ a completed risk assessment for the visit to the landmark
- ◆ a plan of how the landmark can be visited safely at three different times of day

For Outcome 4 written and/or oral recorded and product evidence is required, gathered under open-book conditions, in the form of:

- ◆ a minimum of three photographs of the landmark under three different lighting conditions
- ◆ a minimum of two sketches of the landmark, highlighting light conditions and effects caused by the lighting

National Unit specification: support notes

Unit title: Animation: An Introduction to Lighting (SCQF level 5)

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 will provide opportunities for candidates to acquire knowledge and apply the fundamental principles of lighting used in art and animation.

Lighting is a vast subject area and the Unit is not intended to provide specialist expertise but to develop basic knowledge and to raise candidates' awareness of lighting, both functionally and aesthetically. Candidates should fully recognise the importance of lighting within art and animation.

Candidates will begin the Unit by gaining an understanding of the theory of lighting and the application of lighting to convey varying moods and aesthetics through Outcomes 1 and 2 and then apply these theories through the two remaining Outcomes through visits and practical activities.

The candidate will also carry out a risk assessment of their chosen landmark adhering to health and safety guidelines such as:

- ◆ risk of transport to be used
- ◆ awareness of traffic conditions
- ◆ policies of any businesses to be visited
- ◆ child protection

Candidates should be supplied with photographic equipment or may use the camera facilities on devices such as mobile phones.

This Unit is partially aligned to the National Occupational Standards Unit:

- ◆ ANIM 18 Set Up Lighting and Cameras for Stop Motion Animation (*Skillset*)

Guidance on learning and teaching approaches for this Unit

This Unit has been developed as part of the National Certificate in Computer Arts and Animation.

Where taken as part of the National Certificate in Computer Arts and Animation at SCQF level 5, opportunities may be taken to link or integrate with other aspects of the NC and a thematic approach adopted for both delivery and assessment. The candidate's learning experience would be greatly enhanced if this Unit was delivered prior to any animation or modelling Units.

National Unit specification: support notes (cont)

Unit title: Animation: An Introduction to Lighting (SCQF level 5)

In this Unit candidates will research the types and properties of lighting available prior to developing an appreciation of the way light can create moods and aesthetics and is used in everyday life to enhance the presentation and appeal of everyday objects, as well as art exhibits, scenes in film and TV and general merchandising. Candidates will develop a lighting study of a landmark in response to a brief and planning visits to the landmark at different times of the day to experience varying lighting conditions. They will analyse and assess the importance of all factors influencing and affecting the study, including health and safety issues. They will produce three photographs of the landmark under different lighting conditions and from these produce two sketches showing differing lighting examples.

Outcome 1

As candidates will have limited or no knowledge of the principles of lighting, the delivery should be informative — lecture/seminar based. Content should focus on the fundamental principles of lighting, types of lighting, light sources and physical properties, shadows, colour, intensity, light fitting types and aesthetic applications, rather than on an expert level of technical knowledge.

External site visits and guest lecturers with specialist knowledge would be beneficial as would group tasks to encourage active discussion.

Candidates should be encouraged to use a wide variety of research sources and to show initiative in finding original sources of research.

Outcome 2

External visits would be beneficial to raise awareness of the lighting designs which surround us on a daily basis. Lectures, seminars and specialist guest lecturers may be appropriate in the delivery of this Outcome, as would group tasks to encourage active discussion.

Teachers/lecturers may be required to monitor the progress of the lighting work on a one to one basis during class time, ensuring that there is a cohesive pattern of analysis and evaluation.

Outcome 3

Candidates could be briefed for this Outcome in conjunction with a list of possible landmarks which would give a clear context for the lighting study. It is envisaged that where possible, landmarks chosen are close to the delivering centre. Candidates' planned visits can be discussed on a one to one basis with the teacher/lecturer or in group discussions.

A plan of visits to the landmark, to ensure different lighting conditions, must be produced. It is expected that visits may be done at very short notice to ensure differing lighting conditions are observed and photographed; therefore plans may have to be altered following the actual site visit at a later date.

National Unit specification: support notes (cont)

Unit title: Animation: An Introduction to Lighting (SCQF level 5)

Outcome 4

Candidates should be briefed for this Outcome in conjunction with Outcome 3 and visits must be organised to comply with health and safety guidelines.

Candidates' interpretation of lighting ideas can be discussed on a one-to-one basis with the teacher/lecturer or in group discussions.

To ensure different lighting conditions are observed, it is expected that visits may be done at very short notice to ensure differing lighting conditions are observed and photographed. It is envisaged that one sketch will show the effect of light, for example, where the sun is casting strong shadows and that the other sketch shows contrasting conditions. These sketches will be based on the photographs that the candidate gathers showing these conditions but the sketches completed, unaffected by weather, in the classroom environment.

Guidance on approaches to assessment for this Unit

In relation to Outcomes 1 and 2 candidates could produce a folio of evidence which contains research information that shows a developing knowledge of the principles and uses of lighting and its effects on art and animation media. Examples could be selected by the teacher/lecturer or the candidate.

Outcomes 3 and 4 are practical in nature.

Candidates are encouraged to use the internet for research purposes, however teachers/lecturers must be satisfied that the evidence produced is the candidate's own work.

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)*.

National Unit specification: support notes (cont)

Unit title: Animation: An Introduction to Lighting (SCQF level 5)

Opportunities for developing Core Skills

In this Unit candidates will:

- ◆ describe types and properties of lighting
- ◆ describe how light can create moods
- ◆ select examples to illustrate aspects of lighting
- ◆ produce a plan for a visit
- ◆ carry out a risk assessment
- ◆ assess lighting conditions
- ◆ produce photographs and sketches

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

In addition candidates may develop aspects of the following Core Skills where specific learning and teaching approaches are adopted:

- ◆ *ICT* — through use of the internet in their research
- ◆ *Working with Others* —through group research, planning and practical activities.
- ◆ *Problem Solving* — through communicating ideas, analysing and assessing situations in order to make decisions. They will plan and think critically and apply conclusions, to produce a lighting study which will involve a level of creative thinking.

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
02	Core Skills Components Critical Thinking at SCQF level 5 and Planning and Organising at SCQF level 4 embedded.	29/09/2011

© 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.