Higher National Unit specification

General information for centres

Unit title: 3D Animation: Drawing Skills

Unit code: F5GD 34

Unit purpose: This Unit is designed to enable candidates to understand and apply basic drawing techniques to illustrate form, volume and mass. The Unit is designed as an introduction to the creation of artwork for use in the planning stages of an animation production, computer animation production, video production, games production or film production, or any other similar situation where artwork must be produced to illustrate characters, scenes, or concepts.

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

1 Analyse human, animal and organic subjects to reduce to basic structures.
2 Illustrate a range of human, animal and organic structures using primitive shapes.
3 Produce detailed illustrations of a range of human, animal and organic structures, which show form, volume and mass.
4 Produce finished Model Sheet for an object to an agreed brief.

Credit points and level: 1 HN credit at SCQF level 7: (8 SCQF credit points at SCQF level 7*)

**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.

Core Skills: There are opportunities to develop the Core Skill component Using Graphical Information of the Core Skill *Numeracy* at SCQF level 4 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: Assessment for Outcome 1 requires the candidate to analyse a range of human, animal and organic source materials and illustrate their basic skeletal structure reduced to line, sphere, cylinder and cube forms.

Practical assessment evidence for Outcomes 2, 3 and 4 is linked as drawings produced for Outcome 2 are developed in Outcomes 3 and 4.

General information for centres (cont)

Assessment for Outcome 2 requires the candidate to originate a range of human, animal and organic forms and illustrate them in terms of basic skeletal structure. Assessment for Outcome 3 requires the candidate to develop a range of human, animal and organic forms from a basic skeletal structure, adding detail and tone to create the illusion of form, volume and mass. Outcome 4 requires the production of a Model Sheet based upon the illustration of an object developed in Outcomes 2 and 3.

Higher National Unit specification: statement of standards

Unit title: 3D Animation: Drawing Skills

Unit code: F5GD 34

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

Analyse human, animal and organic subjects to reduce to basic structures

Knowledge and/or Skills

- Human, animal and organic forms
- Anatomical structure
- Primitive lines, shapes and skeletal structure
- Bulk, mass and joints

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by producing a series of illustrations which reduce human, animal and organic forms to primitive shapes. The illustrations should show that the candidates can:

- analyse human, animal and organic subjects to reduce to basic structures
- analyse the forms and structures of the subjects with reference to basic anatomical structure
- identify basic primitive lines, shapes, and skeletal structure
- reduce the subjects to basic primitive shapes using a minimum of two different primitives
- identify areas of bulk, mass, joints and relationship between primitive shapes and anatomy

Illustrations should be produced for five full figure humans, five full figure animals biped and quadruped, five human faces, five animal heads, five organic sources.

Assessment Guidelines

Candidates could select and analyse a range of source materials or subjects from material selected from existing found images, Internet sources or from live models in order to understand how primitive shapes can be used to construct artwork. The candidates should pay particular attention to areas of bulk, joints and relationship between primitive shapes and anatomy. Basic shapes should then be presented as a separate element from the original source, ie as a tracing or a hard copy digital image illustrating elemental shapes (lines, spheres, cubes, cylinders). Illustrations may be produced using traditional pencil and paper or a suitable digital medium.

Higher National Unit specification: statement of standards (cont)

Unit title: 3D Animation: Drawing Skills

Outcome 2

Illustrate a range of human, animal and organic structures using primitive shapes

Knowledge and/or Skills

- Form, proportions and structure
- Mass and joints
- Paper or digital based illustration

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by producing a series of original freeform sketches using traditional pencil and paper or a suitable digital medium which shows that they can:

- illustrate from primitive shapes the basic skeletal structures for two full figure humans, two head and shoulders of humans, two full figures of animal type creatures and one organic object
- illustrate form, proportions and basic skeletal structure within the illustrations
- illustrate mass and joints through additional line and primitive shapes within the illustrations

Assessment Guideline

Illustrations may be created using traditional pencil and paper, or suitable digital medium and must illustrate form, proportions and basic skeletal structure. No detail is required at this stage and sketches should be only of basic structure. Candidates should present sketches as drawings on paper or in a hard copy digital format.

Outcome 3

Produce detailed illustrations of a range of human, animal and organic structures which show form, volume and mass

Knowledge and/or Skills

- Line illustrations
- Detailing
- Light and tone
- Form, volume and mass

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by producing a series of detailed illustrations developing the basic illustrations created in Outcome 2 which show that they can:

- create detailed line illustrations of at least two full figure humans, two head and shoulders of humans, two full figures of animal type creatures, and one organic object
- include distinguishing features on illustrations
- add effects of light and tone to illustrations to create impression of form, volume and mass

Higher National Unit specification: statement of standards (cont)

Unit title: 3D Animation: Drawing Skills

Assessment Guidelines

Candidates should present finished illustrations to a given brief provided by the candidate or the tutor. Illustrations could be created using traditional pencil and paper, or suitable digital medium and should illustrate form, proportions and skeletal structure. Distinguishing features should be included on the illustrations, which should also illustrate the use of light and tone to create impression of form, volume and mass (weight). The illustrations for Outcome 3 should be based on those sketches produced for Outcome 2, but should be presented separately to indicate a progression from basic primitive shapes to fully rendered illustrations. Evidence should be gathered that the processes of Outcomes 1 and 2 have led to an understanding of form, structure and mass, in order to produce finished illustrations for Outcome 3. While it is expected that candidates' illustrative abilities may vary, their finished illustrations should be of a discernable quality for use as concept art, character sketches, storyboard illustrations, or a similar level of competency for use in the planning stages of a project. Candidates should present sketches as drawings on paper or in a hard copy digital format.

Outcome 4

Produce finished Model Sheet for an object to an agreed brief

Knowledge and/or Skills

- Model Sheet
- Character design
- Front view
- Side view
- Three-quarters view

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills to show that they can:

- source three examples of existing Model Sheets and reference
- create detailed design for an object developed to an agreed brief
- illustrate object in proportion from front, side and three-quarter view
- present finished artwork of model sheet as hard copy or in a suitable digital format hard copy

Finished illustrations should be of a discernable quality for use as Model Sheets, or a similar level of competency to illustrate a full character design for use in the planning stages of a project and on a level with industrial practice.

Assessment Guidelines

Candidates should look at industry based model sheet layout and level of detail. They should use this information to assess the level of detail required in the industry and produce an object developed to an agreed brief which could be an original character, mechanical, or organic object and should be illustrated in the form of a model sheet, giving views of the object from front, side, and three-quarter views keeping object in proportion. This could be created using traditional pencil and paper, or a suitable digital medium and should be presented as hard copy or in a suitable digital format hard copy.

Administrative Information

Unit code: F5GD 34

Unit title: 3D Animation: Drawing Skills

Superclass category: JB

Original date of publication: August 2008

Version: 01

History of changes:

Version	Description of change	Date

Source: SQA

SQA acknowledges the valuable contribution that Scotland's colleges have made to the development of Higher National qualifications.

Additional copies of this Unit specification can be purchased from the Scottish Qualifications Authority. Please contact the Customer Contact Centre for further details, telephone 0845 279 1000.

Higher National Unit specification: support notes

Unit title: 3D Animation: Drawing Skills

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

The Unit is designed as an introduction to the creation of artwork for use in the planning stages of an animation production, computer animation production, video production, games production or film production, or any other similar situation where artwork must be produced to illustrate characters, scenes, or concepts.

Candidates should select and analyse a range of source materials or subjects from material selected from existing found images, Internet sources or from live models to show their ability to abstract the materials or subjects to primitive shapes, notably lines, spheres, cubes and cylinders, in order to understand how primitive shapes can be used to construct artwork. Candidates should then create a range of basic skeletal structure sketches based on primitive shapes and finally should produce at least two full figure illustrations of humans, two head and shoulders of humans, two full figures of animal type creatures, and one organic object. Distinguishing features must be included on the illustrations as appropriate, eg detailed eyes, nose, mouth etc, which must also illustrate the use of light and tone to create impression of form, volume and mass (weight). While it is expected that candidates' illustrative abilities may vary, their finished illustrations will be expected to be of a discernable quality for use as concept art, character sketches, storyboard illustrations, or a similar level of competency for use in the planning stages of a project. In Outcome 4 candidates should look at examples of Model Sheets and then use the evidence they have generated in Outcomes 1, 2 and 3 to produce a full Model Sheet for an object which meets the specifications of a client brief. Examples of industry standard Model Sheets should be studied as part of this Outcome in order to achieve a sufficient standard of presentation.

This finished Model Sheet would normally take the form of a human, animal or similar biped or quadruped, for example a design for an alien, cartoon, or computer generated character. However, inanimate objects are also acceptable if more appropriate, for example cars, trees, complex organic forms, etc provided that the illustrations are fully detailed.

Guidance on the delivery and assessment of this Unit

This Unit is likely to form part of a Group Award in 3D Animation and it is best studied in this context, though it could be suitable for other art related awards.

Candidates could be encouraged to examine a range of illustrations, sketches and character sheets throughout the Unit, particularly examples from actual productions, series, or concept art. Candidates are not expected to have any prior knowledge of drawing skills, but will practise skills in how to break down images into component shapes in order to understand and recreate the stages involved in the production of artworks. A high level of drawing skill is not expected, but the ability to structure and visualise is necessary. Outcome 1 should be delivered and assessed as a standalone Outcome, but Outcomes 2, 3 and 4 must be integrated, showing the stages of image creation.

Higher National Unit specification: support notes (cont)

Unit title: 3D Animation: Drawing Skills

Outcome 1

Candidates should select and analyse a range of source materials or subjects to show their ability to abstract the materials or subjects to primitive shapes, notably lines, spheres, cubes and cylinders, in order to understand how primitive shapes can be used to construct artwork. The candidates must pay particular attention to areas of bulk, joints and relationship between primitive shapes and anatomy. The material may be selected from existing found images, Internet or from live models, but must include full figures as well as details. Basic shapes must then be presented as a separate element from the original source, ie as a tracing or digital image illustrating primitive shapes. A minimum must be five full figure humans, five full figure animal's biped and quadruped, five human faces, five animal heads, five organic sources.

Outcome 2

Candidates must create a range of basic skeletal structure sketches based on primitive shapes (lines, spheres, cubes and cylinders). A minimum must be at least two full figure illustrations of humans, two head and shoulders of humans, two full figures of animal type creatures, and one organic object. Illustrations may be created using traditional pencil and paper, or suitable digital medium and must illustrate form, proportions and basic skeletal structure. No detail is required at this stage, and sketches must be only of basic structure.

Outcome 3

Candidates must produce at least two full figure illustrations of humans, two head and shoulders of humans, two full figures of animal type creatures, and one organic object. Illustrations may be created using traditional pencil and paper, or suitable digital medium. Distinguishing features must be included on the illustrations, eg detailed eyes, nose, mouth etc, which must also illustrate the use of light and tone to create impression of form, volume and mass (weight). The illustrations will be based on those sketches produced for Outcome 2, but must be presented separately to indicate a progression from basic primitive shapes to fully rendered illustrations. Evidence must be gathered that the processes of Outcomes 1 and 2 have led to an understanding of form, structure and mass, in order to produce finished illustrations. While it is expected that candidates' illustrative abilities may vary, their finished illustrations must be of a discernable quality for use as concept art, character sketches, storyboard illustrations, or a similar level of competency for use in the planning stages of a project.

Outcome 4

Candidates must produce a fully detailed Model Sheet of an object of their own design, developed to an agreed brief which could be an original character, mechanical, or organic object. This must illustrate front, side and three quarters views, presented together on one document, and in the same scale and proportions as for industry standard Model Sheets. Examples of industry standard Model Sheets should be studied as part of this Outcome in order to achieve a sufficient standard of presentation.

Higher National Unit specification: support notes (cont)

Unit title: 3D Animation: Drawing Skills

Opportunities for developing Core Skills

Providing the candidate is methodical and accurate in the production of detailed illustrations, particularly Model Sheets, there are opportunities to develop the Core Skill component Using Graphical Information of the Core Skill *Numeracy* at SCQF level 4 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Open learning

This Unit could be delivered by flexible, open learning using a blended delivery method. a Virtual Learning Environment could provide some support to candidates. It would be helpful for the candidate to occasionally visit the course tutor to reflect on the technical and aesthetic elements of the illustrations created which would be better communicated face to face. There would also have to be a mechanism in place to ensure the authenticity of the work produced as the candidates own.

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

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In Outcome 1 you will select and analyse a range of source materials or subjects to show your ability to abstract the materials or subjects to primitive shapes, notably lines, spheres, cubes and cylinders, in order to understand how primitive shapes can be used to construct artwork. You will be encouraged to pay particular attention to areas of bulk, joints and relationship between primitive shapes and anatomy. The material you choose to develop may be selected from existing found images, Internet or from live models, but must include full figures as well as details. Basic shapes must then be presented as a separate element from the original source, ie as a tracing or digital image illustrating primitive shapes. Illustrations may be created using traditional pencil and paper, or hard copy from a suitable digital medium.

In Outcome 2 you will use the experience gathered from reducing objects to primitive shapes in Outcome 1, in order to create your own original freeform sketches based on primitive shapes. These should include two full figure illustrations of humans, two head and shoulders of humans, two full figures of animal type creatures, and one organic object. These should not be detailed illustrations at this stage but should illustrate form, proportions, and basic skeletal structure indicating mass and joints. These basic sketches will be further developed in Outcome 3.

In Outcome 3 you will develop the sketched images produced in Outcome 2 in order to produce two full figure illustrations of humans, two head and shoulders of humans, two full figures of animal type creatures, and one organic object. These should illustrate the use of light and tone to create the impression of form, volume and mass (weight). While it is expected that your illustrative abilities may vary, your finished illustrations must be of a discernable quality for use as concept art, character sketches, or storyboard illustrations.

In Outcome 4 you will produce a fully detailed Model Sheet of an object which meets the specifications of an agreed brief. This will require illustrated front, side and three-quarters views, presented together on one document and in the same scale and proportions as for industry standard Model Sheets. Examples of industry standard Model Sheets should be studied as part of this Outcome in order to achieve a sufficient standard of presentation.

There are opportunities to develop the Core Skill component Using Graphical Information of the Core Skill *Numeracy* at SCQF level 4 in this Unit, this may be achieved through detailed and accurate representation of scale and proportion in Model Sheet, although there is no automatic certification of Core Skills or Core Skills components.