

Unit Title:	Character Modelling
Level:	3
Sub-level:	Unit 304
Credit value:	7
Guided learning hours:	60

Unit purpose and aim

This unit helps learners to familiarise themselves with the more advanced aspects of character modelling for the creative and media sector. It allows them to understand the client brief and time frames and deadlines and preparation techniques to form part of the project planning and creation process:

- Candidates will investigate different uses and technologies of character modelling.
- Create and maintain a project plan for the creation of a character modelling to the client brief
- Create and edit the character modelling
- Evaluate the final product with against the original brief

The aim of this unit is for the learner to develop an awareness of the current use of character modelling software and the implications of this technology in the Creative Media sector. The learner will also learn how to exploit these technologies to reach new audiences and generate revenue.

Learning Outcomes	Assessment Criteria	Knowledge, understanding and skills
1 Know how to investigate the use and technologies of character modelling	1.1 Research and describe the current and historical uses and applications of character modelling 1.2 Describe the uses of a) clay modelling b) marionettes c) computer modelling d) drawing e) cut-outs f) for a target audience 1.3 Compare how the differing characteristics of modelled characters give meaning within the medium used	A minimum of 3 historical and 3 current concepts/principles should be researched. This may also include how the techniques and visual style of different applications of character modelling have influenced current styles. Historical may be considered to be more than 25 years old. Evidence of history of models – e.g. Ray Harryhausen, Pixar, Disney, Mr Benn, Morph Candidates should identify how these characteristics impact on the target

	<p>1.4 Describe the computer hardware and peripherals required to produce a 3D character</p> <p>1.5 Describe the key features of 3D modelling software used to create characters</p>	<p>audience</p> <p>Candidates should investigate the existing market for 2D or 3D characters e.g. film, TV, games, advertisements</p> <p>Candidates should produce profiles to identify physical characteristics of identified characters.</p> <p>Candidates should identify the computer specification, software applications and requirements together with other equipment needed to produce and render the digital 3D characters.</p> <p>Identify the hardware required to design and render a 3D character – processor, drive space, monitors, monitor size and resolution</p>
<p>2 Be able to plan a 3D character according to a specific brief</p>	<p>2.1 Identify client requirements based on their brief and consider the target audience</p> <p>2.2 Generate a range of original initial design concepts for the character and review with the client</p> <p>2.3 Expand the selected concept to create visualisations for a range of character views</p> <p>2.4 Identify the details of proposed movements/actions that will be included to realise the 3D character</p> <p>2.5 Create and maintain a project plan to include</p> <p>a) tasks b) timescales c) resources</p> <p>2.6 Identify key stages, production constraints and contingency planning</p>	<p>The character may be humanoid, a creature, robot, avatar or other object that allows for character representation with movement</p> <p>Candidates will draft initial ideas based on client brief and then meet with client to discuss and finalise design and concept.</p> <p>Redrafting ideas based on initial feedback from client.</p> <p>Character features that may be enhanced could include limbs, antennae for insects or creatures, clothing movement in response to the environment etc. These will be identified within the concept drawings.</p>

	2.7 Describe the legal and ethical issues regarding 3D character design and usage	
3. Be able to create, test and export the planned 3D character model	<p>3.1 Create and source assets required</p> <p>3.2 Use the 3D software to create the model applying surface finishes/colours</p> <p>3.3 Enhance the character model using light, camera angles, and rendering</p> <p>3.4 Create and use a detailed test plan to check for consistency of views, surface finishes, lighting and rendering</p> <p>3.5 Correct any identified faults and retest using the test plan</p> <p>3.6 Save and export the character model in the required format as specified by the client brief to allow the client to view from multiple angles</p> <p>3.7 Organise electronic files using appropriate naming conventions to facilitate access by others</p>	<p>Creation of the model will include – mesh building and modelling tools. Select objects, group objects, use layers, snap objects.</p> <p>Candidates will source the assets they require for their character. They will build up the character using the modelling tools within the software and build the mesh.</p> <p>Candidates should use the 3D interface to build their character they should select objects, use layers.</p> <p>Candidates should use lighting, camera angles and rendering to enhance the model.</p> <p>Export in a suitable format for client (e.g. shockwave, quicktime, jpeg)</p>
4 Understand how to review the 3D character model	<p>4.1 Identify parameters and constraints that influenced any decisions that were made</p> <p>4.2 Critically evaluate the quality of the finished product and its fitness for purpose</p> <p>4.3 Evaluate the 3D character with the client and analyse feedback</p> <p>4.4 Identify areas for improvement and further development of the 3D character using your own critical evaluation and the analysis of client feedback</p>	<p>Critical personal evaluation, commenting on the quality of finished product and its fitness for purpose</p> <p>Review the technical and aesthetic qualities of the final outcome</p> <p>Obtain feedback from the client and/or the target audience</p> <p>Identify parameters and constraints that influenced decisions made. For example asset manipulation, file formats, compression techniques, permission and subject matter/location, copyright, IPR, trademarks</p>

	4.5 Review the technical and aesthetic qualities of the final outcome	etc Maintain accurate written records of relevant information about assets obtained, such as source, ownership, any restrictions on use, where they are located, filenames given
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Assessment

Assessment will consist of the candidate producing evidence to an OCR set or centre devised brief. All the learning outcomes and assessment criteria must be clearly evidenced in the submitted work, which is remotely moderated by OCR within their e-portfolio solution.

Results will be Pass or Fail.

Evidence requirements

This unit aims to equip the candidate with the ability to produce professional work for a client to create a character model to a standard that meets the requirements of the brief. The candidate is able to work with the client to an agreed design brief to produce a completed product and to use the necessary tools and source the required resources as appropriate.

- 1 Candidates should present a report or presentation to show their research and investigations, discussing the use and applications of character modelling.
- 2 A project plan to show that they have identified and considered the client requirements, that they understand the appropriate equipment, resources and formats of the character model to meet the brief. Candidates should be able to produce a project plan to create and manage the character model.

Candidates should create sketches or drawings of ideas.

These sketches should be digitised and submitted with a planning document for moderation.

The project planning document, showing workflow, tasks, timescales etc must clearly meet all the learning outcomes must be submitted for moderation and maintained throughout the project.

- 3 Be able to produce the character model in line with their plan to include:
 - Creating and sourcing assets required

- Using the 3D software to create the model applying surface finishes/colours
- Enhancing the character model using light, camera angles, and rendering
- Creating and using a detailed test plan to check for consistency of views, surface finishes, lighting and rendering
- Correcting any identified faults and retesting using the test plan
- Saving and exporting the character model in the required format as specified by the client brief to allow the client to view from multiple angles
- Organising electronic files using appropriate naming conventions to facilitate access by others

These produced files should be digitised for submission although candidates should be encouraged to create them digitally initially.

Evidence should also include a list of file names, types and properties of created files.

Candidates should submit the edited files and annotated screen captures in a report will also assist in evidencing their activities.

- 4 Candidates should prepare an evaluation file to compare the finished product to the original brief and plan.

This should include the identification of any parameters and constraints that influenced decisions that were made e.g. file formats, asset manipulation, software and hardware constraints, copyright permissions, a critical evaluation of the quality of the finished products, their fitness for purpose and justifying the choices made.

An evaluation of the character model with the client must be recorded, feedback logged and analysed.

In this critical evaluation candidates should also identify areas for improvement and further development of the character model using their own critical evaluation and the analysis created from the client feedback.

Guidance on assessment and evidence requirements

Candidates must produce all work to an acceptable standard and meet all the identified assessment objectives and learning outcomes.

A report that incorporates, for example, client discussion, written brief, specification, end user requirements, purpose and timescales must be submitted.

Screen captures of the finished product do not evidence the planning process.

Screen captures will need to evidence the creation process, using an appropriate range of tools and techniques

Candidates should submit files created at all stages of the process to include the final product. This evidence should be provided in compressed digital formats.

Students should produce a critical evaluation reflecting upon how successfully the product meets the requirements of the brief, identifying any parameters and constraints that influenced their decisions. (e.g. file formats, asset manipulation, software and hardware constraints, copyright permissions) identifying what they would do differently if faced by a similar task and why.

You should refer to the 'Admin Guide: Vocational Qualifications (A850)' for Notes on Preventing Computer-Assisted Malpractice.

Details of relationship between the unit and national occupational standards

OCR Creative iMedia		Content crossover with National Occupational Standards	
Unit	Title		
304	Character modelling	IM1 ANIM 17 PI 1	Work Effectively in Interactive Media Build Characters (Models) for Stop Motion Animation Apply Copyright and Other Laws Relating to Usage and Licensing of Images

Resources

Equipment: A computer system capable of running a range software packages that will enable the candidate to meet the requirements of the client must be used. Other equipment may include cameras, microphones and props.

Additional information

For further information regarding administration for this qualification, please refer to the OCR document 'Admin Guide: Vocational Qualifications' (A850).