

# 2023 Subject & Assessment Guide

## 3D Art Pipeline

CUA51020 Diploma of Screen and Media

CUA51120 Diploma of Visual Arts

Art Stream

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# 3D Art Pipeline

## Units of Competency

The units of competency that are covered in this subject are as follows:

[CUAANM313](#) - Create 3D digital models

Assessment processes and competency evidence requirements are described in the *Assessment Criteria* section below. If you have prior or other evidence against competency you should discuss this with your trainer.

## Subject Overview

### Overall Learning Outcomes

- Planning, approval and production stages of the 3D art pipeline
- Introductory 3D software knowledge
- Introductory modelling, texturing, UV mapping, lighting and rendering skills

### Subject Description

In this subject, you will be introduced to the workflow within a 3D art Pipeline. This will include learning and working through the planning, production and approval stages of a project.

You will learn the UI and basic functionality of a 3D application. You will be introduced to the concepts of 3D modelling, shaders and texture mapping. From there you will begin to learn lighting and rendering.

### Industry Relevance

Every studio, be it Games or Visual effects, start using this basic pipeline when creating any 3D Asset. Although they might all have their specific pipeline and tools, the overall fundamentals remain the same.

In this subject we will be using industry standard 3D applications and texturing tools.

### Assumed Knowledge

- Basic computer operation skills
- Problem solving abilities

# Assessment Criteria

## Assessment Description

### Assessment Milestones

Please refer to your class schedule for actual dates on your campus.

### General Description

For this assessment you will be tasked with the creation of a multiple 3D assets utilising the skills and techniques learnt through this subject. You'll also need to follow a pre-production documentation and approval process.

An overview of the production is as follows

1. You'll receive a specific brief or task from your assessors that you'll need to deliver. You will be required to use your creativity within the boundaries of what your assessor has requested.
2. The key to this assessment is following the process of pre-production planning, approval and production to produce the deliverables that have been agreed to.
3. You will be assessed on your ability to produce the final product and follow the production workflow.

Outline of the production workflow.

- You'll need to prepare the pre-production planning documentation as requested
- You must seek approval for your work whilst in production as agreed
- You must complete the project as requested

Lastly, you'll need to demonstrate you can maintain healthy work practice and a healthy workspace during your work.

*Please refer to the rubric below for more specific details.*

### Evidence Specifications

This is the specific evidence you must prepare for and present by your assessment milestone to demonstrate you have competency in the above knowledge and skills. The evidence must conform to all the specific requirements in the table listed below. You may present additional, or other evidence of competency, but this should be as a result of individual negotiation with your trainer.

### Your Roles and Responsibilities as a Candidate

- Understand and feel comfortable with the assessment process.
- Know what evidence you must provide to demonstrate competency.
- Take an active part in the assessment process.
- Collect all competency evidence for presentation when required.

This table defines what you need to produce as evidence of competency.

Assessment Tasks & Evidence Descriptions
<p><b>1. Maintain healthy work practice</b></p> <p>Evidence that includes:</p> <ul style="list-style-type: none"> <li>• Workspace and work practice organised to mitigate WHS risks.</li> </ul>
<p><b>2. Pre-production</b></p> <p>Evidence that includes:</p> <ul style="list-style-type: none"> <li>• A basic rigged model</li> <li>• A prepared portfolio of reference images in-line with the requirements of the provided brief.</li> <li>• A schedule laying out the major milestones and required software.</li> <li>• Documentation recording the agreed deliverables naming conventions, modelling techniques and formats.</li> <li>• Concepts do not infringe copyright.</li> <li>• Pre-Production has been undertaken and approved.</li> </ul>
<p><b>3. Production</b></p> <p>Evidence that includes:</p> <ul style="list-style-type: none"> <li>• Two or more separate models created according to the requirements of the provided brief.</li> <li>• Models are free from errors and use agreed naming conventions and formats.</li> <li>• Appropriate backups have been made throughout production.</li> <li>• Work in progress during the production has been presented, reviewed, and approved.</li> </ul>
<p><b>4. Completed Production</b></p> <p>Evidence that includes:</p> <ul style="list-style-type: none"> <li>• Deliverables presented according to the requirements of the provided brief.</li> <li>• Deliverables in the agreed format, with the agreed naming conventions.</li> <li>• The final deliverables have been submitted and the brief requirements have been met and approved.</li> </ul>
<p><b>5. Evaluation</b></p> <p>Evidence that includes:</p> <ul style="list-style-type: none"> <li>• Review work and evaluate for areas of improvement in future.</li> </ul>

# Assessment Instructions for Candidate

## METHOD OF ASSESSMENT

Assessment is a cumulative process which takes place throughout a subject. A 'competent' or 'not yet competent' decision is generally made at the end of a subject. Your assessment will be conducted by an official AIE qualified assessor. This may be someone other than your trainer. The evidence you must prepare and present is described above in this assessment criteria document. This evidence has been mapped to the units of competency listed at the beginning of this document. Assessments will be conducted on a specific milestone recorded above in this assessment guide document.

## ASSESSMENT CONDITIONS

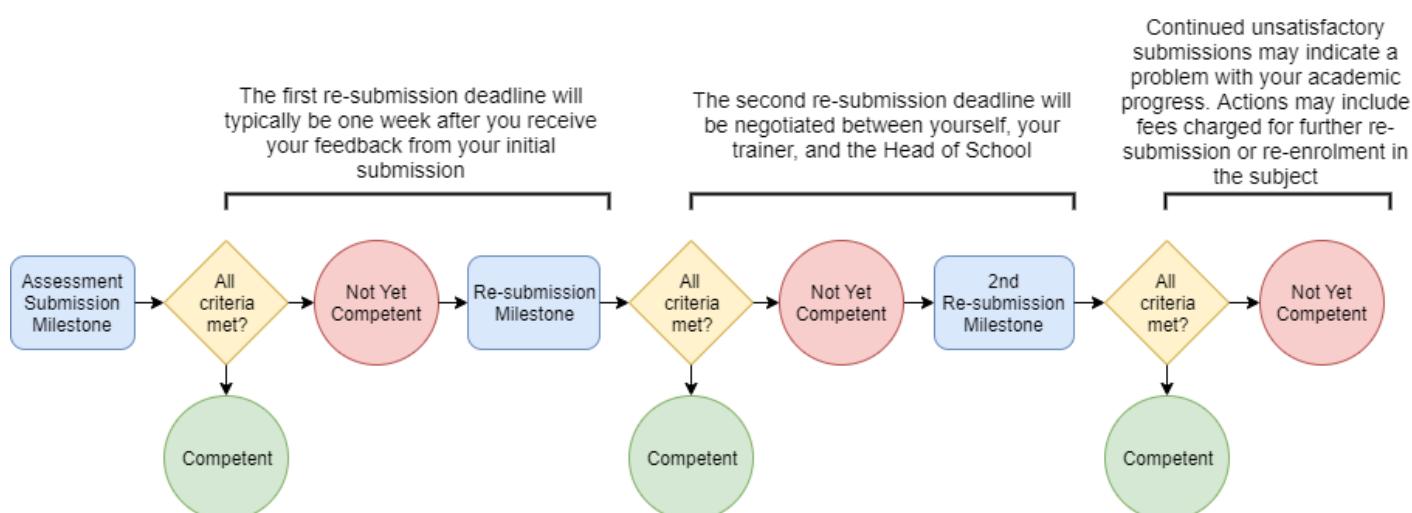
Formative assessment takes place as your trainer observes the development of your work throughout the subject and, although the assessor is likely to be aware of the evidence you are submitting, it is your responsibility to be prepared for the interview where a competency judgement is made (summative assessment). Forgetting something, or making a small mistake at the time of the milestone assessment, can be corrected. However, the assessor may choose to assess other candidates who are better prepared and return to you if time permits.

Upon completion of the assessment, you will be issued with feedback and a record of the summative assessment and you'll need to acknowledge that you have received the result. If you have not submitted the required evidence by the assessment milestone (without prior agreement or a sufficiently documented reason) you will be assessed as not yet competent.

## GRADING

The assessment you are undertaking will be graded as either *competent* or *not yet competent*.

## REASSESSMENT PROCESS



If you are assessed as being not yet competent you will receive clear, written and oral feedback on what you will need to do to achieve competence. You will be given a reassessment milestone no more than one (1) week later to prepare your evidence. If you are unsuccessful after your reassessment, you may be asked to attend a meeting with your Head of School to discuss your progress or any support you may need and further opportunities to gain competency.

### **REASONABLE ADJUSTMENTS**

We recognise the need to make reasonable adjustments within our assessment and learning environments to meet your individual needs. If you need to speak confidentially to someone about your individual needs, please contact your trainer.

### **FURTHER INFORMATION**

For further information about assessment and support at AIE, please refer to the assessment and course progress sections of your student handbook.

## Software

### **Maya**

Autodesk Maya is the primary 3D software learners should be most familiar with. Maya is the core 3D package to create game models, UV unwrap reading for textures, rigging, animation, lighting and rendering.

<http://www.autodesk.com.au/products/maya/overview>

### **Photoshop**

Photoshop is used predominantly in studios and is considered to be the essential package for creating textures and images.

<http://www.adobe.com/au/products/photoshop.html/>

### **Substance Painter**

Substance Painter is a 3D painting software allowing you to texture and render your 3D meshes.

<https://www.substance3d.com/products/substance-painter/>

### **Marmoset Toolbag**

Marmoset Toolbag is a real-time rendering toolkit used for final presentation.

<https://marmoset.co/toolbag/>

### **Sketchfab**

Sketchfab is a viewer allowing users to display 3D models on the web.

<https://sketchfab.com/feed>