



# Loreto College Coorparoo

## Semester 1 2022

### YEAR 9 Technology: Digital & Design

<b>Student</b>		<b>Teacher</b>	Mr Li
<b>Issued</b>	Jan 2022	<b>Due Date</b>	Thur 17 March 9B (3), 9C (6), Fri 18 March 9A (1)
<b>Unit</b>	CAD Design & 3D Printing		

#### Conditions

<b>Technique</b>	Designing solutions to Human Centred Design (HCD) problems		
<b>Duration</b>	7 Weeks		
<b>Mode</b>	Project Based Learning	<b>Length</b>	
<b>Individual/ group</b>	Individual	<b>Other</b>	
<b>Resources available</b>	Technology Portal, Ultimaker 3D Printers, 123D Design Software		

<b>Assessment Dimensions</b>	<b>A+</b>	<b>A</b>	<b>A-</b>	<b>B+</b>	<b>B</b>	<b>B-</b>	<b>C+</b>	<b>C</b>	<b>C-</b>	<b>D+</b>	<b>D</b>	<b>D-</b>	<b>E+</b>	<b>E</b>	<b>E-</b>
1. Knowledge & Understanding															
2. Processes & Production Skills															

#### Authentication strategies

The teacher will provide class time for task completion.
The teacher will consult with each student as they develop their responses.
Student progress will be monitored, and digital copies of student responses will be collected at the checkpoints.

## CRITERIA SHEET

	A	B	C	D	E
<b>The folio of a student's work has the following characteristics:</b>					
<b>K &amp; U</b>	<b>discerning</b> evaluation of the features of 3D Printers and CAD applications and their appropriateness for purpose when producing designed solutions for identified design briefs	<b>informed</b> evaluation of the features of 3D Printers and CAD applications and their appropriateness for purpose when producing designed solutions for identified design briefs	evaluation of the features of 3D Printers and CAD applications and their appropriateness for purpose when producing designed solutions for identified design briefs	<b>explanation</b> of the features of 3D Printers and CAD applications and their appropriateness for purpose when producing designed solutions for identified design briefs	<b>statements</b> about the features of 3D Printers and CAD applications for one or more of the identified design briefs
<b>P &amp; PS</b>	<b>purposeful</b> creation of design ideas using processes of increasing complexity. <b>Discerning</b> justification of decisions	<b>effective</b> creation of design ideas using processes of increasing complexity. <b>Informed</b> justification of decisions	creation and connection of design ideas using processes of increasing complexity. Justification of decisions	<b>partial</b> creation of design ideas and processes. <b>Explanation</b> of decisions	<b>fragmented</b> creation of design ideas and processes. <b>Statement</b> of decisions

### Context

You will learn how 3D printing is used in society and how to create your own printable 3D designs.

### Tasks

You are to complete:

- Bag Tag Design (*Summative*)
- Animal Toy Design (*Summative*)
- Paste Pusher (*Extension 1*)

### CHECKPOINTS

Week 4 of Term 1 — progress check (Bag Tag)

Week 6 of Term 1 — progress check (Animal Toy)

### To complete this task, you must:

Refer to the detailed instructions provided on the Digital & Design Portal at:

[http://dt.loreto.qld.edu.au/9/U2\\_3D\\_Printing/1\\_intro.html](http://dt.loreto.qld.edu.au/9/U2_3D_Printing/1_intro.html)

### ETHICAL SCHOLARSHIP DECLARATION – CAD Design & 3D Printing unit

I, \_\_\_\_\_, confirm and acknowledge that the work produced in this assessment, including 123D files, are my own. Any words/phrases that I have used from other sources have been referenced and acknowledged.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_