

Peicai Secondary School
 Subject Overview for Semester 1 2023
 Design & Technology | Secondary 4 | Normal (Academic)

Semester 1			
Term 1 [3 Jan – 10 Mar]			
Week	Chapter/Topic/Skill/Area	Assignment/ Homework	Weighted Assessment
Week 1 [2 Jan – 6 Jan]	Start Smart Program		-
Week 2 [9 Jan – 13 Jan]	Start Smart Program		-
Week 3 [16 Jan – 20 Jan] <i>18-Jan (Wed) timetable replaced with Monday timetable</i> <i>CNY celebrations, 20 Jan (Fri)</i>	<ul style="list-style-type: none"> • Class Admin. <ul style="list-style-type: none"> ○ National Exam coursework syllabus briefing ○ Release of Coursework QP ○ Project theme analysis • Start of Coursework <ul style="list-style-type: none"> ○ Overall Project Planning ○ Analysis of theme 	<ul style="list-style-type: none"> - Gantt chart - Theme definition, - Mood board 	-
Week 4 [23 Jan – 27 Jan] <i>CNY, 23 Jan (Mon) & 24 Jan (Tue)</i>	<ul style="list-style-type: none"> • Coursework <ul style="list-style-type: none"> ○ Analysis of theme ○ Needs Analysis 	<ul style="list-style-type: none"> - Mindmap - Identification of problem situations 	-
Week 5 [30 Jan – 3 Feb] <i>HBL A, 1 Feb (Wed)</i>	<ul style="list-style-type: none"> • Coursework <ul style="list-style-type: none"> ○ Needs Analysis ○ Selection of Chosen Situation • HBL assignment <ul style="list-style-type: none"> ○ Theory revision on Mechanisms ○ Continuation of coursework assignments 	<ul style="list-style-type: none"> - Identification of problem situations - Decision matrix for chosen problem situation 	-
Week 6 [6 Feb – 10 Feb]	<ul style="list-style-type: none"> • Coursework <ul style="list-style-type: none"> ○ Research on Chosen Situation <ul style="list-style-type: none"> - Existing Products - Survey and Survey Results, 	<ul style="list-style-type: none"> - Existing products analysis - Survey and survey results summary 	-
Week 7 [13 Feb – 17 Feb] <i>WA1 (Part 1) on 15 Feb (Wed)</i>	<ul style="list-style-type: none"> • WA1 Written Test • Coursework <ul style="list-style-type: none"> ○ Research on Chosen Situation <ul style="list-style-type: none"> - Target User - Environment ○ Design Brief ○ Design Considerations & Constraints ○ Design Specifications 	<ul style="list-style-type: none"> - User & Environment analysis - Stating of design brief - Identify design considerations & constraints - Stating of design specs. 	WA1 – Written Test <u>Topics:</u> Design Process & Mechanisms -

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Week 8 [20 Feb – 24 Feb]	Error Analysis WA1 Written Paper <ul style="list-style-type: none"> • Coursework <ul style="list-style-type: none"> ○ Idea Conceptualisation 	- Ideation	-
Week 9 [27 Feb – 3 Mar] <i>WA1 (Part 2) on 1 Mar (Wed)</i>	<ul style="list-style-type: none"> • Coursework <ul style="list-style-type: none"> ○ Idea Conceptualisation ○ Evaluation of Ideas (Chosen Idea) 	- Ideation - Decision matrix for chosen idea	
Week 10 [6 Mar – 10 Mar]	<ul style="list-style-type: none"> • Coursework <ul style="list-style-type: none"> ○ Development of Chosen Idea <ul style="list-style-type: none"> - Forms & Functions - Critical Dimensions and Sizing - Anthropometry & Ergonomics 	- Exploration of Forms & Functions - Critical dimensions & sizing - Anthropometry & Ergonomics considerations	-
Term 2 [20 Mar – 26 May]			
Week	Chapter/Topic/Skill/Area	Assignment/ Homework	Weighted Assessment
Week 1 [20 Mar – 24 Mar] <i>HBL B, 22 Mar (Wed)</i>	<ul style="list-style-type: none"> • Coursework <ul style="list-style-type: none"> ○ Development of Chosen Idea <ul style="list-style-type: none"> - Forms & Functions - Critical Dimensions and Sizing - Anthropometry & Ergonomics • HBL assignment <ul style="list-style-type: none"> ○ Theory revision on Electronics ○ Continuation of coursework assignment 	- Exploration of Forms & Functions - Critical dimensions & sizing - Anthropometry & Ergonomics considerations	-
Week 2 [27 Mar – 31 Mar]	<ul style="list-style-type: none"> • Coursework <ul style="list-style-type: none"> ○ Mock-ups ○ Testing & Evaluation of Mock-ups 	- Mock-ups making - Testing & Evaluation of mock-ups	-
Week 3 [3 Apr – 7 Apr] <i>HBL C, 5 Apr (Wed) Good Friday, 7 Apr</i>	<ul style="list-style-type: none"> • Coursework <ul style="list-style-type: none"> ○ Mock-ups ○ Testing & Evaluation of Mock-ups • HBL assignment <ul style="list-style-type: none"> ○ Theory revision on Design Process ○ Continuation of coursework assignment 	- Mock-ups making - Testing & Evaluation of mock-ups	-

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<p>Week 4 [10 Apr – 14 Apr]</p>	<ul style="list-style-type: none"> • Coursework <ul style="list-style-type: none"> ○ Development of Chosen Idea <ul style="list-style-type: none"> - Types of Technology (if applicable) - Choice of Materials - Colour Options - Methods of Construction & Assembly 	<ul style="list-style-type: none"> - Application of technology (if relevant) - Proposed materials choice - Proposed colour scheme - Methods of construction and assembly consideration 	<p style="text-align: center;">-</p>
<p>Week 5 [17 Apr – 21 Apr]</p> <p><i>Oral Prelims for S4/5 on 19 Apr (Wed)</i></p>	<ul style="list-style-type: none"> • Coursework <ul style="list-style-type: none"> ○ Details for Prototyping <ul style="list-style-type: none"> - Working drawings 	<ul style="list-style-type: none"> - Parts drawing - Orthographic Projection - Exploded view 	<p style="text-align: center;">-</p>
<p>Week 6 [24 Apr – 28 Apr]</p> <p><i>WA2 (Part 1) on 26 Apr (Wed)</i></p> <p><i>Hari Raya Puasa, 24 Apr (Mon)</i></p>	<ul style="list-style-type: none"> • Coursework <ul style="list-style-type: none"> ○ Details for Prototyping <ul style="list-style-type: none"> - Material List - Presentation drawing • WA2 Written Test 	<ul style="list-style-type: none"> - Material List - Presentation Drawing 	<p style="text-align: center;">WA2 – Written Test <u>Topics:</u> Design Process & Electronics</p>
<p>Week 7 [1 May – 5 May]</p> <p><i>Labour Day, 1 May (Mon)</i></p> <p><i>Oral Prelims for S4/5 on 3 May (Wed)</i></p>	<ul style="list-style-type: none"> • Error Analysis Written Paper • Coursework <ul style="list-style-type: none"> ○ Details for Prototyping <ul style="list-style-type: none"> - Material List - Presentation drawing 	<ul style="list-style-type: none"> - Material List - Presentation Drawing 	<p style="text-align: center;">-</p>
<p>Week 8 [8 May – 12 May]</p> <p><i>WA2 (Part 2) on 10 May (Wed)</i></p>	<ul style="list-style-type: none"> • Coursework <ul style="list-style-type: none"> ○ Production Planning ○ Prototyping <p><i>* Students to bring along their aprons</i></p>	<ul style="list-style-type: none"> - Production schedule 	<p style="text-align: center;">-</p>
<p>Week 9 [15 May – 19 May]</p> <p><i>HBL D, 17 May (Wed)</i></p>	<ul style="list-style-type: none"> • Coursework <ul style="list-style-type: none"> ○ Prototyping • HBL assignment <ul style="list-style-type: none"> ○ Theory revision on Design Process Continuation of coursework assignment <p><i>* Students to bring along their aprons</i></p>	<ul style="list-style-type: none"> - Prototype 	<p style="text-align: center;">-</p>

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<p style="text-align: center;">Week 10 [22 May – 26 May]</p>	<ul style="list-style-type: none"> • Coursework <ul style="list-style-type: none"> ○ Prototyping <p><i>* Students to bring along their aprons</i></p>	<ul style="list-style-type: none"> - Prototype 	
<p style="text-align: center;">June Holidays Lesson Wk 1&4 (TBC)</p>	<ul style="list-style-type: none"> • Coursework <ul style="list-style-type: none"> ○ Prototyping ○ Evaluation of prototype ○ Presentation Boards Update <p><i>* Students to bring along their aprons</i></p>	<ul style="list-style-type: none"> - Prototype - Prototype evaluation - Presentation Boards 	

**This subject overview is tentative and is subject to changes.*