



<p>This half term: Skills, Knowledge and Understanding to be developed:</p> <ul style="list-style-type: none"> SKILLS: Each individual will be able to design, develop and model a range of ideas for their chosen Design Brief. KNOWLEDGE: Students will understand and know about the importance of good presentation and developing their idea to make the product as a high quality item. UNDERSTANDING: Students will show their understanding by designing and developing their idea before manufacturing. They will also learn about technical terms and processes. They will understand the importance of iterative design where they will gain opinion of others and their own in refining their product. 		<p>Key Terms / Words:</p> <p>Brief, Analyse, Data, Ideas, Develop, Design, Prepare, Diagrams, Resources, Product, Materials, Research, Consider, Samples, Drawing, Intricate, Machine, Components, Tools, Anthropometric, CAD, Modelling, Iterative, Joints.</p>	
<p>Week 1 Learning Outcomes:</p> <p>1 - 4 Students will.....demonstrate their creative skills by designing another idea or their product. They will develop it by showing all parts, components, views and measurements to their improved design. They will research into relevant materials and finishes to the drawing and record them in their sketchbooks. They need to understand how their product will be made by modelling a scaled solution for the design. They will use a range of materials, tools and equipment to model the design and record the steps taken in their sketchbooks. They will then ask for peer advice and feedback in improving on their solution – this can be done through testing and opinion of others.</p>		<p>Success Criteria</p> <ol style="list-style-type: none"> Students will explain their intentions/ideas clearly. Students will discuss and consider other possibilities by further developing the design 	<p>Homework W1</p> <p>Continuous Homework: Developing ideas</p>
<p>Week 2 Learning Outcomes:</p> <p>5 - 9 Students will.....understand the need to re-design their work in their sketchbooks for further development. Students will know how to produce their solution by practicing different joints, CAD/CAM work and testing of materials and finishes. Any other relevant research based on their product i.e. ergonomics / anthropometric / sustainable issues need to be looked into and recorded. All modelling work will need to be evaluated and peer assessed.</p>		<p>Success Criteria</p> <ol style="list-style-type: none"> Students will explain their intentions/ideas clearly. Students will discuss and consider other possibilities by further developing the design. 	<p>Homework W2</p> <p>Continuous Homework: Researching into relevant materials / finishes / CAD drawing</p>
<p>Week 3 Learning Outcomes:</p> <p>10 – 14 Students will.....know how to select a range of materials and apply different finishes to them as samples for their choice of a final finish. They will produce a chart displaying results of different finishes and sample a safety test with evidence of scratching, indentation and flammability on different forms of materials. As each student will follow their own individual brief, they will need to cost out and source materials. They will also need to measure their scaled model to work out the final sizes before buying all the needed material to start on the basic marking out / construction of their product.</p>		<p>Success Criteria:</p> <ol style="list-style-type: none"> Students will explain their intentions/ideas clearly. Students will discuss and consider other possibilities by further developing the design. Students will design their project using CAD 	<p>Homework W3</p> <p>Continuous Homework: Planning for production and material sourcing / requirements</p>
<p>Week 4 Learning Outcomes:</p> <p>15 – 19 Students will.....demonstrate their practical skills by basic marking out / cutting / jointing and constructing of their product. Students will know how to use tools safely to measure and mark their parts and components to size. They must Quality assure the equipment and Check the different manufacturing steps (i.e. measurements). Students will also demonstrate their cutting skills by using the appropriate tools to cut out different parts. <i>* It must be noted that all students' activities will differ in complexity and their individual production stages.</i> <i>* Production lessons are given as a guide only.</i></p>	<p style="text-align: center;"></p> <p>Exam Theory Question:</p> <div style="border: 1px solid blue; padding: 2px; width: fit-content; margin: 5px auto;">APP1</div> <div style="border: 1px solid red; padding: 2px; width: fit-content; margin: 5px auto;">Grade:</div>	<p>Success Criteria:</p> <ol style="list-style-type: none"> Students will work independently and communicate their own personal practical lesson objectives clearly with the teacher. Students will discuss possibilities in terms of construction methods as well as creative techniques with the teacher as the piece of work develops over time. 	<p>Homework W4</p> <p>Continuous Homework: Planning for production and material sourcing / requirements. Investigate joining / fabrication methods.</p>
<p>Week 5 Learning Outcomes:</p> <p>20 – 23 Students will.....demonstrate their practical skills by basic cutting / jointing and constructing of their product. Students will demonstrate their cutting skills by using the appropriate tools to cut out different parts.</p>		<p>Success Criteria:</p> <ol style="list-style-type: none"> Students will work independently and communicate their own personal practical lesson 	<p>Homework W5</p> <p>Continuous Homework:</p>

<p>Students will know how to use tools safely to measure and mark their parts and components to size. They must Quality assure the equipment and Check the different manufacturing steps (i.e. measurements/cut parts). Using the cut sections, students will understand how to mark out different joints ready for cutting.</p> <p><i>* It must be noted that all students' activities will differ in complexity and their individual production stages.</i></p> <p><i>* Production lessons are given as a guide only.</i></p>		<p>objectives clearly with the teacher.</p> <p>2. Students will discuss possibilities in terms of construction methods as well as creative techniques with the teacher as the piece of work develops over time.</p>	<p>Investigate joining / fabrication methods.</p>
<p>Week 6 Learning Outcomes:</p> <p>24 - 27 Students will.....demonstrate their practical skills by basic marking out / cutting / jointing and constructing of their product. Students will know how to use tools safely to measure and mark their parts and components to size. They must Quality assure the equipment and Check the different manufacturing steps (i.e. measurements). Students will also demonstrate their cutting skills by using the appropriate tools to cut out different parts. All changes and developments must be clearly noted and justified in their sketchbooks.</p> <p><i>* It must be noted that all students' activities will differ in complexity and their individual production stages.</i></p> <p><i>* Production lessons are given as a guide only.</i></p>	<p style="text-align: center;">  Practical work Progress <div style="border: 1px solid blue; padding: 2px; display: inline-block; margin: 5px;">SA</div> <div style="border: 1px solid red; padding: 2px; display: inline-block; margin: 5px;">Grade:</div> </p>	<p style="text-align: center;">Success Criteria</p> <p>1. Students will work independently and communicate their own personal practical lesson objectives clearly with the teacher.</p> <p>2. Students will discuss possibilities in terms of construction methods as well as creative techniques with the teacher as the piece of work develops over time.</p>	<p>Homework W6</p> <p>Continuous Homework: Planning for production and material sourcing / requirements. Investigate joining / fabrication methods.</p>

This programme is subject to change.