

Grange Academy

Senior Phase Assessment Overview

2024-25

NATIONAL 5 DESIGN AND MANUFACTURE



Week/Month	Learning Focus	Homework	Assessment	Coursework Submitted to SQA
May	<p>Course introduction</p> <p><u>Design Factor Analysis:</u> Function Aesthetics Performance Market Ergonomics</p>	<p>Weekly homeworks covering the following:</p> <ol style="list-style-type: none"> 1. Function and Aesthetics 2. Performance and Markets 3. Ergonomics 		
June	<p><u>The Design Process:</u> Analysing a brief: research Analysing a brief: specification Generating ideas Developing ideas Modelling in the design process Use of graphics CAD/ 3D Modelling</p> <p><u>Materials and Manufacture Theory:</u> Basic introduction of wood joints and plastic forming processes.</p>	<p>Weekly homeworks covering the following:</p> <ol style="list-style-type: none"> 1. The Design Process 2. The purpose of modelling 3. Sketching homeworks 		

	Practical modelling activity – working with wood and plastics.			
August	Unit 1 - DESIGN Practice Design Folio Project: Brief	Weekly homeworks covering the following: 1. Design process 2. What is a brief 3. The purpose of a specification 4. Research homework 5. Idea generation 6. Developing ideas 7. Refining ideas 8. Modelling		
September	Specification Research Idea generation			
October	Development Refinement Modelling Plan for manufacture Commercial Manufacture Theory		Unit Assessment - delivered with a project brief, such as the “Egg Holder” Commercial Manufacture: End of Unit Assessment	
October	Unit 2 – MATERIALS AND MANUFACTURE Practical Project: Create finished project with multi materials and various joining methods, choosing these independently to best suit the needs of the given project.	Weekly homeworks covering the following: 1. Practical wood joints 2. Marking out tools 3. Marking out processes 4. Reading drawings 5. Tool selection 6. Clamping and cramping 7. Finishing 8. Metal processes 9. Plastics processes 10. Assembly methods 11. Planning for manufacture		
November	Materials and Manufacturing theory topics will be taught alongside the unit project.			
December			Unit Assessment - delivered with a project brief, such as the “Beach Hut Money Box”	
December	PRELIM Full Prelim			

January	Final Assignments Design Assignment = 55 marks Practical Assignment = 45 marks Design Assignment 7 x A3 Folio Sheets covering the following:	Weekly homeworks covering all course content, in exam style questions.	School deadlines will be set to aid the completion of the assignments.	
February	1.1 Research 1.2 Idea Generation 1.3 Development 1.4 Refinement 1.5 Evaluation			
March	Practical Assignment Final practical project, assessed on:			Design Folio Assignment – Sent to SQA Worth 31% Practical Assignment – marked internally, verified by SQA Worth 25%
April	Theory Revision for Exam	Exam style homework questions		