

Product Design @ WBS Year 10 Roadmap

Subject Aim: Students will build upon prior knowledge of theory concepts and the practical workshop skills that they have covered at KS3 to provide additional experience of subject related tools and processes and create a base of technical knowledge.

The structure of the Year 10 course is centred around project-based learning activities which aim to cover key theoretical and practical aspects of the syllabus.

	TOPIC 1	ASSESSMENT IN YEAR 10
AUTUMN TERM	<p>Introduction to the Product Design course and assessment criteria is outlined.</p> <p>In this first term, students study and experiment around various topics – the first being the properties, suitability and application of a variety of materials. Next, students will gain an understanding of Mechanical, Electronic and Programming Systems. Lastly, students will study the core section of the course, Timber, and produce a mini NEA project – the purpose of which is to immerse them in the NEA experience prior to undertaking the task later in the year.</p>	<p>Each practical project will be assessed as follows:</p> <p>Photographic evidence of the completed project outcomes uploaded to Brightspace portfolio</p> <p>Self-assessment evaluation comments and student feedback in the Portfolio comments</p> <p>Overall grade for each project on Brightspace portfolio and entered into Brightspace gradebook</p> <p>Theory knowledge will be assessed by Brightspace quizzes for each aspect of the syllabus which will output marks to Brightspace gradebook</p>
SPRING TERM	<p>In the Spring term, students study a variety of topics in theoretical and practical elements to build their technical knowledge. Topics include Energy Sources and their impact on the environment, Design Communication and Design strategy to hone their design skills, Product Analysis, Smart/ Modern Materials and their application and Life Cycle Analysis. The above will be carried out through a combination of individual study, group projects, presentations and practical investigation.</p>	<p>Homework is integrated into each project and will cover vital aspects of the syllabus. Instructions for homework are posted in assignments and are either submitted on paper or to Brightspace assignments depending on the outcome.</p> <p>Grading for the homework assignments is in the Brightspace gradebook</p>
SUMMER TERM	<p>During the Summer Term, students will complete their study of subject theory and begin the early stages of their NEA project.</p> <p>The last topics studied will be the impact of New Technology, ethics of Product Design and New Technology and the environmental, social and economic responsibilities of Product Design</p>	<p>REVISION FOR ASSESSMENTS IN YEAR 10</p> <p>Content in the form of revision textbook chapters for each of the theory aspects of the syllabus can be found on Brightspace and is intended to support students when revising for the Brightspace quizzes.</p>
	<p>Topic 4</p> <p>Introduction to the NEA coursework project. <i>Students will be introduced to the newest brief set by the exam board and the structure of the NEA.</i></p> <p>Creating a Design Proposal. <i>They will next pick a theme that they are interested in and begin research into the area.</i></p> <p>Analysing the design context set by the exam board & Identifying design problems, possibilities and user needs. <i>Students analyse user feedback, media articles, market research and current trends.</i></p> <p>Produce a range of design ideas. <i>Students will develop a range of iterative, creative design ideas that respond to the brief.</i></p>	<p>ENRICHMENT THEMES IN YEAR 10</p> <p>SMSC and British Values: Please see The Creative Designs Department’s SMSC Document. Throughout the course students will discuss various Product Design related careers and what skills are linked to real jobs in the industry. This will be driven by certain aspects of the specification content. Cultural Capital: Cultural Capital: Students will study a wide range of designers from a variety of backgrounds, and will also view and study different social, economic and cultural groups from a variety of backgrounds so that they can be encouraged to emphasise and relate to others demonstrating that they can also achieve their aspirational dreams irrespective of their own background. Extra-curricular lessons will also run every week to help support students with their theory, NEA</p>

and practical work and it is essential students use these facilities to reach their potential grades.

Where Next?

The following year of the course concentrates on the completion of the NEA project in which will demonstrate their knowledge of a range of Product Design skills and techniques to respond creatively to a brief set by the exam board.