DESIGN & TECHNOLOGY (GCSE)

Examination Board **OCR** **J310**

Overview of the course

GCSE Design and Technology places great emphasis on understanding and applying iterative design processes. Students will learn new skills including Computer Aided Design and apply their creativity and imagination to design and make prototypes that solve real and relevant problems, considering their own and other's needs, wants and values.

Course content

There is distinct content for the examined component (01) and the non-examined component (02/03), however all learning will be delivered through the following topic areas:

- Identifying requirements
- Learning from existing products and practice
- Implications of wider issues
- Design thinking and communication
- Material considerations
- Technical understanding
- Manufacturing processes and techniques
- Viability of design solutions.

How you will be assessed

Unit	Assessment	Percentage of overall result
Written Exam 2 hours	This will include both the 'core' principles that all students must know, and 'in-depth' knowledge of Polymers and Timbers. Students will need to: • analyse existing products • demonstrate applied mathematical skills • demonstrate their 'core' design and technical knowledge and understanding • demonstrate and apply their in-depth technical knowledge of working with materials, ensuring functionality of products or systems and manufacturing processes and techniques.	50%
Non Examined Assessment Approximately 40 hours	The non-examined assessment is the requirement for learners to understand and apply the processes of iterative designing in their design and technology practice: exploring needs, creating solutions and evaluating how well the needs have been met. They will be expected to make using a range of materials and processes when developing their design solutions. Students produce a chronological portfolio and final prototype. This demonstrates their understanding and independent management of and skills in iterative designing, in particular: • the interrelated nature of the processes used to identify needs and requirements (explore) • creating solutions to meet those needs (create) • evaluating whether the needs have been met (evaluate).	50%

Students who successfully complete this course will be awarded a GCSE graded on a nine point scale: 1 to 9 – where 9 is the best grade.

Post 16 courses available

Students may move on to study Product Design at A level.

Students who study Design & Technology at GCSE and A level could go on to enter careers in product development, industrial design, engineering, architecture and many other creative industries.