Design and Technology

Curriculum Staff:

Department Intent: To prepare confident students for a changing technological society through designing, consideration and expression with of a range of materials and processes.

KS4

Intention Overview:

Curriculum Knowledge
Year 10: Autumn term-students will be designing, modelling and making within a design brief for a clock. They will analyse the topic, research and become knowledgeable of design movements and the levels of work needed for GCSE. Modelling is an important part in the development of any product and will be assessed as a skill for the actual GCSE qualification. They will be introduced to wider use of Computer Aided Design and the production of drawings that can be sent to Computer Aided Manufacturing machines if needed. They will use basic tools to shape materials. They will use finishes appropriately to improve the appearance of the final product. Spring term-students will be completing focussed practical tasks to develop knowledge and skills in metals, wood, plastics and card to cover further areas of the curriculum along with study of the work of specified designers and influences on the design and making processes. They will cover further knowledge that will be used in both the exam and the upcoming non-examined assessment (NEA). The NEA is worth 50% of the GCSE grade and takes place in lessons during the Summer term and run on until February in Y11 (the remainder coming from the examination). This will begin on June 1st. On this date, the exam board will provide the school with three context statements. Each student must choose one of these contexts and then begin to analyse and investigate the area. Through their investigation, they will need to choose a client to work with and identify a problem that can be solved by the design and manufacture of a product. They will need create ideas that could be solutions to the problem, model them, and come up with a solution to follow through with. The chosen solution must be modelled and a plan formed that can be followed to make the solution. Once made to a high standard, the solution must be evaluated against success criteria and by a third party. When this component is complete, we will return to the accumulation of knowledge in preparation for the examination. **Year 11:** Autumn term-students are currently working on their NEA (non-examined assessment) which is worth 50% of the GCSE grade. This began on June 1st. On this date, the exam board provided the school with three context statements. Each student chose one of these contexts and then began to analyse and investigate the area. Through their investigation, they will need to choose a client to work with and identify a problem that can be solved by the design and manufacture of a product. They will need create ideas that could be solutions to the problem, model them, and come up with a solution to follow through with. The chosen solution must be modelled and a detailed plan formed that can be followed to make the solution. Once made to a high standard, the solution must be evaluated against success criteria and by a third party. Due to the current situation and the need to work safely, the solution this year will be modelled and does not have to be created using resistant materials. The exam board is compensating for this by placing a greater emphasis on the plan for making the solution. This must be completed by February Once this is complete, students will return to the accumulation of knowledge for the exam in preparation for the summer exams