LONG TERM PLANS

Year Overview (GCE Product Design (7551 and 7552) Year 12/13)

ADT Faculty

Design and Technology – GCE Product Design (7551 and 7552) YEAR 12/13 <u>This is a two year course</u>

Various Practical tasks and portfolio building

Aims: This creative and thought-provoking qualification gives students the practical skills, theoretical knowledge and confidence to succeed in a number of careers. Especially those in the creative industries. They will investigate historical, social, cultural, environmental and economic influences on design and technology, whilst enjoying opportunities to put their learning in to practice by producing prototypes of their choice.
In year 1 a number of small design and make products will be made throughout the year developing and improving knowledge and understanding of a wide range of materials, processes and equipment. The teaching delivery model will expect a lot of independent research and encourage independence in students to take responsibility for their own areas of research.

In year 2, the Non Examined Assessment (NEA) is the selection, by the student, of a context that will provide them with the opportunity to challenge themselves as a designer. Care should be taken to ensure that the context chosen offers the scope and complexity for a piece of work that is worthy of consideration for the award of an A-level.

Having chosen their context and potential user(s) they then need to plan and carry out an extensive investigation into all aspects of the context in order that they might operate from a position of knowledge when making subsequent decisions. Students will be expected to employ a variety of both primary and secondary methods of investigation. These might include visits organised by themselves or others, surveys and questionnaires could be used to inform. Useful and relevant material can be gained from others via the internet, books, magazines or interviews. Students will be encouraged to undertake, where relevant, practical experimentation and disassembly as methods for further understanding and exploring the context and its related issues.

The exams and non-exam assessment will measure how students have achieved the following assessment objectives:
• AO1: Identify, investigate and outline design possibilities to address needs and wants.
• AO2: Design and make prototypes that are fit for purpose.
• AO3: Analyse and evaluate: design decisions and outcomes, including for prototypes made by them and consider others and wider issues in design and technology.
• AO4: Demonstrate and apply knowledge and understanding of: technical principles and designing and making principles.

NEA coursework, Written (or electronic) design folder and a manufactured outcome. Candidates submit evidence of a simple, substantial designing and making activity.

External examinations:
Paper 1 – technical principles – 2.5 hours
Paper 2 – designing and making principles – 1.5 hours

Cross curricular links: **Literacy:** Pupils will learn how to break down, analyse and discuss design aspects, using appropriate critical written and spoken vocabulary.
ICT: The internet will be used to research and develop ideas and a variety of design software will be used to convey ideas. Various drawing conventions will be applied to communicate and develop your design. Digital imagery will be used to support your research and your solutions and present your ideas.
Maths and Science: All A-level specifications in design and technology must require students to demonstrate their application of knowledge, understanding and skills of maths and science in both theoretical and practical ways. Design and technology uses maths and science to support decisions made in the processes of designing and making
Key Assessment Activity: practical making of a* substantial design and make project*, an A3 design portfolio and end of course external examinations.