SUBJECT: A Level Product Design **YEAR**: 12 & 13

HEAD OF DEPARTMENT: Mrs A Brogan

GROUPING POLICY: Year 12 and Year 13 are taught separately

EXAM BOARD: AQA

COURSE CONTENT:

Students will follow the AQA Specification:

http://www.aqa.org.u,/subjects/design-and-technology/as-and-a-level/design-and-technology-product-design-7552

A Level Design and Technology: Product Design requires students to engage in both practical and theoretical study. This requires students to cover design and technology skills and knowledge in the following two areas:

Technical Principles

Areas covered include:

- Materials and their applications
- Performance characteristics of material
- Enhancement of materials
- Forming, redistribution and addition processes
- The use of adhesives and fixings
- The use of finishes
- Modern industrial and commercial practice
- Digital design and manufacture
- The requirements for product design and development
- Health and safety
- Protecting designs and intellectual property
- Design for manufacturing, maintenance, repair and disposal
- Feasibility studies
- Enterprise and marketing in the development of products
- Design communication
- Modern manufacturing systems

Designing and Making Principles

Areas covered include:

- Design methods and processes
- Design theory
- How technology and cultural changes can impact on the work of designers
- Design processes
- Critical analysis and evaluation
- Selecting appropriate tools, equipment and processes
- Accuracy in design and manufacture
- Responsible design

- Design for manufacture and project management
- National and international standards in product design

ASSESSMENT

How will my child's work be assessed?

- Paper 1
  - Written Exam
  - Time 2.5 Hours
  - Worth 30% A Level

- Paper 2
  - Written Exam
  - Time 1.5 Hours
  - Worth 20% A Level

- Non Exam Assessment (NEA)
  - Design and Make Project
  - 45 Hours Long
  - Worth 50% A Level

Through a mixture of short answers and extended responses, the question papers require students to:

- Analyse and Evaluate
  - Design decisions and outcomes, including for prototypes
  - Wider issues in design and technology

- Demonstrate and Apply Knowledge and Understanding of
  - Technical principles
  - Designing and making principles

Content for NEA:

This is a design and make project where students will explore a context, design a product, make and evaluate the product. The product context will be set by the exam board.