PRODUCT DESIGN

Exam Board:	AQA
Syllabus Code(s)	8552

Contact: smc@hws.haringey.sch.uk

Course Tier Information (where appropriate):

One tier of entry: : 9-1

Course Assessment:

Coursework—Non exam assessment (NEA) 30-35 hours work (approx.). 100 marks available –50% of GCSE (Contextual challenges to be released annually by AQA on June 1st in the year prior to the submission of the NEA)
Written Exam - Two hour paper. 100 marks available –50% of GCSE

General Course Information:

In Year 10 students undertake two design and make projects to develop their skills and to help them undertake the NEA in year 11. Students will also undertake a variety of Design and Make assignments. The purpose of this is to equip students with a greater understanding of the Design Process and to expand on their subject knowledge.

Students will also receive dedicated lessons that will prepare them for exams and develop their technical knowledge. This will include the application of mathematical and scientific principles.

In Year 11, students are expected to engage in a single design and make activity selected from a choice of Contextual Challenges, released in the June of Y10, consisting of the development of a made outcome and a concise design folder. This coursework (NEA) task is to take approximately 30-35 hours of lesson time. It will consist of a concise design folder, which explains the area they have decided to look into and the design and development process leading to a final design solution. It will also show details of product testing, modifications and a final evaluation which includes details of how it could be commercially manufactured.

Students are expected to use a variety of information and communication technology wherever it is possible to do so and to address the moral, social, cultural and environmental issues arising from their work.

As part of the evidence submitted, students should include photographs of the finished products as well as photographs at various stages of the process. This is used as evidence of skills used and processes undertaken.

Useful resources/ways to improve:

Set Text: Hodder Education 'Design & Technology: Textiles Based Materials. **ISBN: 9781510401112**

The course requires a knowledge and understanding of design history and Emerging Materials and Technologies, therefore visits to 'The Fashion and Textile Museum, 'The Victoria and Albert Museum' and 'The Design Museum' will enhance students knowledge.

Students are encouraged to look at blogs and online resources to further their understanding of current developments in Design.

YEAR 10

SEPT 2019 - JULY 2020 *Topics to be studied during the first year of the course.*

NEA Practice 1: "Design for Education"

- Identifying a need
- Anthropometrics & Ergonomics
- Analysing existing products
- Sketching and Rendering Techniques
- Developing a product
- Creating shape in a product

Exam Unit: Designing and Making Principles

- Fabrics and Fibres
- Environmental, Social and Economic Issues In Design
- Impact of culture on design

NEA Practice 2: "Design for a Festival"

- Analysing a task and Identifying a need
- Analysing existing products
- Idea generation
- Developing a product; modelling and toile development
- Testing and Evaluation

Exam Unit: Core Technical Principles

- New and Emerging Technologies – CAD/CAM practical
- Plastics - Fusing Plastics Practical
- Metal Theory
- Timber – using unconventional materials practical
- Working with paper and boards
- Electronics – E-Textiles practical
- Modern and Smart Materials

YEAR 11

SEPT 2020 - JUNE 2021 *Topics to be studied during the second year of the course.*

Non Exam Assessment

Students will be given the opportunity to select a contextual challenge from a range set by the exam board.

They will then work with a client or target user to design, develop and prototype a practical outcome. This will be supported by a design folder of approximately twenty pages.

This work must demonstrate that the iterative design process has been followed. Students will be marked using the same criteria as above for Y10 and externally moderated by the exam board (AQA)

Exam Unit: Designing and Making Principles

Revision

How friends and family can help support students at Key Stage 4

- Showing an interest in what they are doing.
- Asking questions about texts, lessons, topics and themes etc.
- Encouraging students to read as widely and frequently as possible.
- Discussing both their independent reading and their set texts.
- Engage students in conversations about current affairs and events.
- Finding out if there is anything they particularly need help with – e.g. spelling (you could test them too!)
- Ensuring that you and your child know the deadlines