



St Benedict's Catholic School

The Catholic Secondary School for West Suffolk

Design and Technology Product Design Curriculum Guide

Year 10

Exam Board: WJEC (Eduqas)

To find out further information regarding this particular course, please follow the link below.

https://www.eduqas.co.uk/qualifications/design-and-technology-gcse/#tab_overview

Assessment Year10

To prepare students for their NEA task project, work throughout Year 10 will be assessed using the given criteria below. Please note that the marks awarded during Year10 do **NOT** count towards the students final NEA marks – they are used to provide both staff and students with an idea of the standard of work they are currently producing.

Assessment Year 11

The GCSE course has two different assessment elements;

- A non-exam assessment task (N.E.A) marked out of 100 marks across 5 different criteria and worth 50% of the final weighting.
- Criteria A – Identifying opportunities 10 marks
- Criteria B – Design Brief and Specifications 10 marks
- Criteria C – Ideas and development 30 marks
- Criteria D – Planning and Making 30 marks
- Criteria E – Testing and Evaluation 20 marks

Students begin the NEA task after June 1st when the Exam Board have provided the given context to the task.

A two hour theory exam paper marked out of a 100 marks and worth 50% of the final weighting. This exam is taken at the end of Year 11.

Autumn Taught Content

Students start the year with a mixed materials project – design and make a model of a hand held product for someone attending a summer music festival. The main body of the product is made from jelutong, a natural wood which is excellent for modelling work. Smaller features and controls will be made from different plastics and produced using

CAD/CAM equipment. Other key design concepts such as 'meeting the needs of users', ergonomics and quality control are taught and students will look for opportunities to apply this acquired knowledge into their project work.

Assessment focus

Criteria A – Identify opportunities (10 marks)

Criteria C – Ideas and development (30 marks)

Criteria E – Testing and evaluating (20 marks)

Spring Taught Content

Students are given the initial brief to design and manufacture a free-standing *egg holder*. This will be a product used in the kitchen/dining room.

Students learn about different plastic forming processes as well as the need to make jigs and moulds and an insight into related industrial practices. The final product is made from acrylic and parts can be formed using CAD/CAM as well as heat treatment for bending and forming purposes.

During the research and development stages the student has to consider the design influence of a famous designer or design movement eg) Ettore Sottsass (Memphis), Alessi, Phillipe Starck and the Bauhaus.

Homework exercises will include;

Plastics theory and construction methods, famous designers and the study of existing similar products.

Assessment focus

Criteria B – Design Brief and Specifications (10 marks)

Criteria D – Planning and Making (30 marks)

Summer Taught Content

Students take part in a shorter project which will enable them to develop their appreciation of packaging and the role it plays in marketing products. Starting with a set of wheels students have to design and make a push-along toy for a younger child. By identifying the needs and wants of a younger target market group they generate a creative and working final product.

Assessment focus

Criteria C – Ideas and development (30 marks)

Criteria D – Planning and Making (30 marks)

Immediately after the May half term holiday students will begin their GCSE non exam assessment (NEA). This extended project runs through to February half term in Year 11

The WJEC exam board set a context – for the current Year 11 group it is to.... ‘ design and make a product which can make use of space’. This involves the production of a design folder, a sketch book as well as examples of earlier models.

Homework Expectations

Homework tasks are set twice per fortnight. The tasks set will vary depending on the stage of each project, but will include, personal research, investigation or personal visual responses about the given theme and carrying out product testing exercises. In most cases this will involve pupils printing outcomes and bringing these to their next lesson, rather than submitting via Edulink. The homework will predominately help pupils to enhance and inform their classroom work and is vital due to limitations with computer access.

Reading List

Autumn term

‘meeting the needs of users’ -
ergonomics -
quality control –

Spring term

Plastics -
Famous designers -

Summer term

Packaging –
Marketing -