

D&T at Balcarras



Subject	Year	Specialism
Design and Technology	Year 12	Product Design

Project

A Level Mock NEA Project

Content (Intent)

Prior Learning: KS3 D&T. KS4 AQA GCSE NEA and Y12 Bauhaus desk tidy

The focus during this section of the project is for the students to make and evaluate their final product. Students now need to plan and make their final product using a range of materials and processes within the department. They must first product a design specification that sets out key dimensions and material choices. They then have dedicated workshop sessions to complete their final product (prototype). Once the product is complete it will be evaluated with the client and final feedback gathered to help suggest further improvements to the final design. The assessment objectives for this section are: **Development of design prototypes** (AO2 – 25 marks) and **analysing and evaluating** (AO3 – 20 marks)

Future Learning - Y13 NEA project (worth 50% of their overall A Level grade)

How will knowledge and skills be taught (Implementation)		How will your understanding be assessed & recorded (Impact)	
 Manufacturing specification – final CAD images, orthographic drawing, cutting list and parts drawings Manufacturing plan – quality control and quality assurance points added to flow chart of making Manufacturing Diary – steps of making with photographs – H&S, QC and development annotations added Final client feedback – testing with client documented through images and videos Evaluation against specification – measuring the success of the product against the criteria established earlier in the project 		 Assessment: Student work is marked at key intervals to ensure good progress. Verbal feedback as well as self/peer assessment is used during lessons. A more formal assessment is carried out at the end of this project section. Detailed written feedback and a 'working grade' is given so that students understand the level at which they are working and how to improve. Main areas of assessment: Development of design prototypes (AO2 – 25 marks) Analysing and evaluating (AO3 – 20 marks) 	

How can parents help at home?

Parents and carers can ask to view their child's work and offer feedback on their design ideas. Students will need client feedback throughout the project so it is great to get parents involved.

Helpful further reading/discussion (including Reading and Vocabulary Lists)

Reading

A Level AQA Revision Notes Text Book Balcarras Product Design Pages <u>https://www.technologystudent.com/</u> We have many product design books available in the department so please encourage your child to come and have a look!

Vocabulary

Manufacturing specification Orthographic drawing Tolerance Quality control Quality assurance Quantitative Qualitative

Careers Links Product Design Graphic Design Furniture Design Careers in Engineering (Design Engineering, Mechanical Engineering Project Management