

D&T at Balcarras



SubjectYearSpecialismDesign and TechnologyYear 12 / KS5Product Design

Project

Emergency Shelter Project

Content (Intent)

Prior Learning: KS3/KS4 projects (Trick Deck / Chocolate Bar / Café Project)

This project continues to build upon the skills that they have used previously (at KS3, KS4 and as part of their GCSE NEA project), especially those involving graphic design, while also introducing them to new ones. This helps to ensure that the students continue to become increasingly independent and can confidently use a wide range of tools and materials, specifically relating to the design development phase including prototyping and modelling, that will then enable them to design and make products that are of the quality and complexity required at A Level.

As always, Health and Safety is a key focus of this project.

Future Learning: A Level NEA Project

How will knowledge and skills be taught (Implementation)	How will your understanding be assessed & recorded (Impact)
 Students will continue to develop knowledge and skill including: Health and safety in the workshop The role of hand sketching in the design process How to measure accurately and to work to increasingly precise tolerances How to use CAD & CAM to create high-quality conceptual models – both physical and virtual How to work with modelling materials eg laser ply, foamboard and greyboard How to join components competently Sustainability in design How to create a complex design spec How to evaluate effectively 	 Assessment The project is assessed through ongoing teacher assessment. Main areas of assessment: Quality of the final conceptual model and the level of detail included Quality of the design spec, and the level of detail included, and their final evaluation Confident use of D&T specific language Evidence of safe working practices in the workshop Overall subject knowledge and understanding

How can parents help at home?

Students will plan and create a **design specification** and final **evaluation** partially during timetable lessons and also as homework, offering the opportunity to engage with them about the progress of the project and their growing level of confidence, specifically in terms of their model making skills.

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

Reading For modelmaking tips: <u>https://www.youtube.com/watch</u> <u>?v=CnKeVs-_9zs</u> For all-round design inspiration: <u>https://www.dezeen.com/</u>

Vocabulary

Craft knife; scalpel; safety rule; mitre; tabs; laser ply; foamboard; grey board

Careers Links

Careers in: architecture; product design; display and exhibition design; model making; engineering etc.