

DESIGN and TECHNOLOGY - YEAR 9



Subject Content

Problem solving using the Design Process:

- Writing a Design Brief
- Analysis of the task
- Research and investigation
- Analysis of similar products
- Writing a specification
- Designing a solution
- Prototyping
- Developing and Modifying
- Product manufacture
- Testing
- Evaluation of outcome
- Suggesting improvements

Assessment

Students are Teacher assessed through homestudy and classwork tasks. Mid year and end of year tests are set in each Teaching area. Students self assess their own work through evaluation of designs and outcomes. Students regularly request opinions on their work from other students in their group. Progress is monitored throughout the year through the use and analysis of target setting. Attainment Levels are awarded at the end of Key stage 3 and is based on information provided for the Key Stage 3 co-ordinator by all Teaching Staff of all the modules.

Safety

A strong emphasis is placed on Health and Safety within the Department.

Safety is a topic in every lesson.

General safety rules apply for the protection of the individual students, their colleagues and staff

Each teaching area also has its own special requirements and safety is therefore taught through talks and demonstrations as and when required.

Students are expected to provide and use appropriate overalls for Craft Design and Technology and an apron for Food Technology.

Other protective clothing such as safety goggles, dust masks and gloves are provided and instruction is given on their proper use.

Awards

Students who demonstrate excellence are rewarded with Departmental Certificates of Excellence.

On a lower level students are awarded merits and small prizes

ICT

Students are encouraged to use ICT individually at home or in school for the presentation of their work, Computer Aided Design and use of the Internet for research and investigation purposes. Students produce a mini project on the effects of advancing Technology on Society

Teaching Group Arrangements

Students rotate through three areas of Design and Technology

- Food Technology
- Textiles Technology
- Craft Design and Technology

All areas relate to Product Design.

Each area is taught in modules and topics

Food Technology

- Healthy Eating
- Storing Food Safely
- Adapting Recipes to make them Healthy
- Industrial production of the Bakewell Tart
- Healthy Desserts

Textiles Technology

- Design and Make a fashion bag with a original high visibility Logo
- Design a web page to promote the bag

Craft Design and Technology

- Design and Make a Clock
- Design and Make a Night light.

Provision for Gifted and Talented

Design and Technology particularly lends itself to Gifted and Talented Students.

Each student is encouraged to produce individual designs and produce high quality outcomes.

This requires rigorous analysis of the task and similar products, taking into account the wants and needs of the end user.

Full use is made of extension tasks.

After school club Wednesday evening during competitions.

Students enter both internal and external competitions

GCSE Food & Nutrition is available as a twilight course for approximately 15 students.

How the work in Year 9 builds on work in Year 8

The Design and Technology Department implements the Key Stage 3 Strategy which aims to build on Skills and good practices developed in Year 7 and 8.

Students use more complicated design and make tasks to develop questioning, explaining modelling and problem solving techniques and skills.

Analysis, research and investigation and evaluation techniques are improved by encouraging a more logical, systematic and in depth approach. Making skills also improve with more attention to detail.

Care for the Environment

Awareness of the effects of advancing Technology on the Environment is raised by Students producing a mini project on the development, manufacture, use and disposal of plastics.

Spiritual, Moral, Social and Cultural Issues

During Year 9 students are able to apply spiritual, moral, social and cultural values to their work.

Useful Internet websites and other resources

www.nutrition.org
www.foodtech.org
www.howthingswork.com
www.designandtech.com