TECHNOLOGY
Technoleg

Course Title: Technology
Examination Board: WJEC
Qualification: GCSE)

Product Design

COURSE OUTLINE

A course in Design and Technology offers a unique opportunity for students to identify and solve real problems by designing and making products or systems in a wide range of contexts relating to their personal interests. Design and Technology develops students' interdisciplinary skills, all six key skills and their capacity for imaginative, innovative thinking, creativity and independence.

The specification is based upon the view that design and technology is essentially a practical activity involving the combination of skills with knowledge and understanding in order to design and make quality products. The specification is planned to be sufficiently broad, balanced and relevant to interest all candidates.

Students will have the opportunity to analyse and evaluate situations, design and make products and then assess their performance. They will be provided with the opportunity to work with a range of materials and ICT.

Students will be presented with the subject matter in a stimulating and interesting way to promote discussion and research. They will be given the opportunity to experience the variety of roles involved in design and technology; client, designer, maker, manager, user etc. Students will be encouraged to consider the relationship between technology and society.

Students will design and make products. They will carry out activities related to industrial practices and the application of systems and control within their designing and making of these products.

The specification allows candidates to work in one of the following focus areas:

Resistant Materials Technology
Working with wood, plastic and metal

Textiles Technology
Working with Textile materials

Product Design
Working with a wide range of materials such as plastic, metal, glass and textile materials.

Emphasis is on innovation.

HOW WILL I BE ASSESSED?

UNIT 1: WRITTEN PAPER 2 HOURS (40%)

The papers for all focus areas follow a similar structure.

Section 1: Is designed to be answered in 60 minutes and consists of four questions. These questions are set so as to be accessible to students from all focus areas and will relate to Product Analysis, Overarching Principles, Designers and Practitioners and the Design Process. The quality of written communication will be integrated into question 3 and will require paragraphs or essay style responses.

Section 2: Consists of four questions. These are focus area specific and designed to take 60 minutes to answer.

Course Title: Technology
Examination Board: WJEC
Qualification: GCSE

TECHNOLOGY
Technoleg

Resistant Materials

UNIT 2: DESIGN TASK – CONTROLLED ASSESSMENT
30 HOURS (60%)

Students are required to complete one 30 hour design, make and evaluate task. The task is divided into two sections.

Section A is concerned with designing the product and Section B is concerned with planning, making and evaluating the product.

You will be provided with the opportunity to focus on theory topics that specifically link to the focus area.

Graphical Design and CAD and CAM processes are integrated into the subject specification as appropriate in all material areas.

Design, creativity, materials, tools, equipment and manufacturing processes and systems are included on the subject specification list for all material areas.

CAREER OPPORTUNITIES AND PROGRESSION

Product Design, Fashion, Engineering and Manufacturing career opportunities, teaching, architecture as well as apprenticeships in craft based occupations such as carpentry.

Textiles

IMPORTANT NOTE:
Only one technology area can be chosen to study.

Each focus area is to be found in a different option column. Before making a choice for anyone of these options ensure you are fully aware of what the subject involves. For further information please contact: Mrs S Davies - Head of Technology.

Please note: Size for all option groups is 18 pupils.