

## **Design and Technology**

### KEY STAGE 3 DESIGN AND TECHNOLOGY (YEAR 7)

Year 7 students will develop a range of skills through a design and make approach in Food, Resistant Materials and Product Design. They will be exploring how to analyse a problem, investigate and collect research, sketch design ideas and produce a practical outcome through simple design and make projects.

They will be expected to make decisions and work as part of a team and to evaluate their outcomes as well as considering the impact on the environment when designing and making products.

Students are expected to bring a pen and pencil to every lesson. In Food students are expected to bring ingredients as and when requested by their teacher.

### KEY STAGE 3 DESIGN TECHNOLOGY (YEAR 8)

Year 8 students continue to develop the skills and knowledge element of the National Curriculum, but the emphasis this year is on the design and make process. Students will be exploring how to analyse a problem and will investigate and collect research to assist them with their design ideas in preparation for making. They will complete a module of work in each of Food, Resistant Materials and Textiles or Graphics. They will be expected to make decisions and work as part of a team using a range of materials and equipment to develop skills and evaluate their progress. As part of the Citizenship programme, students are taught to consider the needs and views as part of the design and making process.

Students are expected to bring a pen and pencil to every lesson. In Food students are expected to bring in food ingredients as and when requested by their teacher.

### KEY STAGE 4 TECHNOLOGY (YEAR 9)

#### Health and Social Care BTEC (YEAR 9)

The Health and Social Care course consists of two core units and two additional units.

Core Units:

- Unit 1: Human Lifespan Development
- Unit 2: Health and Social Care Values

Additional Units:

- The Impact Of Diet
- Promoting Health and Wellbeing

In this new specification students are required to take one externally moderated unit in Human Lifespan Development (as shown above) which will take place in Year 10 giving time for students to develop their understanding of the components of the subject. Candidates must pass Unit 1 and 2 at Level 2 in order to be awarded a Level 2 qualification at the end of the course.

Coursework is set as a series of assignments which involve researching topics, writing up to meet assessment criteria, proof reading and re-drafting.

## GCSE Food Preparation and Nutrition (YEAR 9)

Lessons will contain a mixture of practical and theory classes to cover the course content and prepare for the examinations.

Subject content will be as follows:

- food preparation skills;
- food, nutrition and health;
- food science;
- food safety;
- food choice;
- food provenance;
- food preparation and cooking techniques.

In order to support this subjects content students will experience a wide range of preparation, cooking and presentation skills.

Students are expected to work safely and hygienically at all times.

## ASSESSMENT

A) Non-exam Assessments (NEA): all take place in the final year.

### Task 1: Food Investigation (30 marks)

Students' understanding of the working characteristics, functional and chemical properties of ingredients.

Practical investigations are a compulsory element of this NEA task.

### Task 2: Food Preparation Assessment (70 marks)

Students will prepare, cook and present a final menu of three dishes within a single period of no more than three hours. A task sheet will be issued by the exam board.

B) Examination (50%): 1 written paper – 1 hour 45 minutes.

#### Resistant Materials / Product Design (YEAR 9)

In Year 9 students will complete a number of short skills based design and make projects using modelling materials, resistant materials and simple electronics.

Students will study core designing and making principles and core technical principles, which will include a broad knowledge of design processes, materials, techniques and equipment.

Relevant Maths and Science skills will also be assessed, with the Maths skills counting for 15% of the written exam in Years 10 & 11. These Maths skills will include calculations of quantities of materials, costs and sizes and the presentation of performance data.

#### Assessment

The GCSE assess project coursework will begin in Year 10 and will be 50% of the final grade, with the other 50% being awarded for the written examination at the end of Year 11.

Both of these courses will be renamed GCSE Design and Technology at the start of Year 10.

### BTEC FASHION & CLOTHING LEVEL 2 AWARD (YEAR 9)

This is a new course that will introduce you to Fashion & Clothing and enable you to extend and develop your knowledge and practical skills.

What you will do:

- Aim to develop your personal qualities and attitudes across a wide range of assignments which focus on technical training and design realisation, which is essential for career development in the fashion industry.
- Give you an introduction to all fashion related subjects. You will gain a clear understanding of the whole design process, from trend prediction to in-store promotion.
- Develop your own style of illustration through observational drawing and will also be taught an industry led computer software package Adobe Photoshop.
- Emphasis is placed on professional practice, with regular 'live' projects set by practising designers and professionals.
- You will be given the opportunity to participate in a wide range of educational visits to local and national museums and galleries; events such as Graduate Fashion Week and The Clothes Show Live.

### Assessment

This course is 75% coursework and 25% exam which is completed in Year 11. All units will be internally assessed, with some units being verified through National Standard Sampling by the Awarding Body.

Work will be graded at Pass, Merit or Distinction.

What can I do next?

This course will help prepare you for progression onto further education. There are a variety of career opportunities relating to fashion including: designer menswear, womenswear or children's wear, visual merchandiser, buyer, stylists etc.

## KEY STAGE 4 TECHNOLOGY (YEAR 10)

### Health and Social Care BTEC (YEAR 10)

The Health and Social Care course consists of two core units and two additional units.

#### Core Units:

- Unit 1: Human Lifespan Development
- Unit 2: Health and Social Care Values

#### Additional Units:

- The impact of diet
- Promoting Health and Wellbeing

In this new specification students are required to take one externally moderated unit in Human Lifespan Development (as shown above) which will take place in Year 10 giving time for students to develop their understanding of the components of the subject. Candidates must pass Unit 1 and 2 at Level 2 in order to be awarded a Level 2 qualification at the end of the course.

Coursework is set as a series of assignments which involve researching topics, writing up to meet assessment criteria, proof reading and re-drafting.

## GCSE Food Preparation and Nutrition (YEAR 10)

Lessons will contain a mixture of practical and theory classes to cover the course content and prepare for the examinations.

Subject content will be as follows:

- food preparation skills;
- food, nutrition and health;
- food science;
- food safety;
- food choice;
- food provenance;
- food preparation and cooking techniques.

In order to support this subjects content, students will experience a wide range of preparation, cooking and presentation skills.

Students are expected to work safely and hygienically at all times.

## ASSESSMENT

A) Non-exam Assessments (NEA): all take place in the final year.

### Task 1: Food Investigation (30 marks)

Students' understanding of the working characteristics, functional and chemical properties of ingredients.

Practical investigations are a compulsory element of this NEA task.

### Task 2: Food Preparation Assessment (70 marks)

Students will prepare, cook and present a final menu of three dishes within a single period of no more than three hours. A task sheet will be issued by the exam board.

B) Examination (50%): 1 written paper – 1 hour 45 minutes.

Product Design (YEAR 10)

In this course you will study a range of topics including:

- materials and components (including resistant materials, card/modelling materials, smart/modern materials etc.);
- designers;
- packaging;
- sustainability and environmental issues;
- drawing techniques and processes;
- industrial practices;
- ICT for designing;
- CAD/CAM (Computer Aided Design and Computer Aided Manufacture);



- safety;
- production design.

## ASSESSMENT

### Coursework (60%)

Students select one final project consisting of a design folder (including use of ICT) and a 3-dimensional product using a range of materials including use of CAD/CAM). The project is a controlled assessment selected from a range of Board set tasks and takes approximately 45 hours to complete.

Examination (40%): 1 written paper – 2 hours.

## Resistant Materials (YEAR 10)

In this course you will study a range of topics including:

- materials (including smart materials), equipment and processes;
- construction;
- methods of production;
- sustainability of design;
- industrial practices;
- systems and control;
- ICT for designing;
- CAD/CAM (Computer Aided Design/Computer Aided Manufacture);
- safety.

## ASSESSMENT

### Coursework (60%) – controlled assessment

Students select one final project consisting of a design folder (including use of ICT) and a 3-dimensional product using resistant materials (including use of CAD/CAM). This project is selected from a range of Board set tasks and takes approximately

45 hours to complete.

Examination (40%): 1 written paper – 2 hours.

## BTEC FASHION & CLOTHING LEVEL 2 AWARD (YEAR 10)

This is a new course that will introduce you to Fashion & Clothing and enable you to extend and develop your knowledge and practical skills.

What you will do:

- Aim to develop your personal qualities and attitudes across a wide range of assignments which focus on technical training and design realisation, which is essential for career development in the fashion industry.
- Give you an introduction to all fashion related subjects. You will gain a clear understanding of the whole design process, from trend prediction to in-store promotion.
- Develop your own style of illustration through observational drawing, and will also be taught an industry led computer software package Adobe Photoshop.

- Emphasis is placed on professional practice, with regular 'live' projects set by practising designers and professionals.
- You will be given the opportunity to participate in a wide range of educational visits to local and national museums and galleries; events such as Graduate Fashion Week and The Clothes Show Live.

#### Assessment

##### Coursework (75%)

Students will work on a selection of Fashion focused projects to produce a body of work which will be internally assessed.

##### Examination (25%) ~ taken in Year 11

1 final piece – 10 hours (students will have 20 hours lesson time to plan and prepare this).

#### What can I do next?

This course will help prepare you for progression onto further education. There are a variety of career opportunities relating to fashion including: designer menswear, womenswear or childrenswear, visual merchandiser, buyer, stylists etc.

#### KEY STAGE 4 TECHNOLOGY (YEAR 11)

##### Health And Social Care BTEC (YEAR 11)

The Health and Social Care course consists of two core units and two additional units.

##### Core Units:

- Unit 1: Human Lifespan Development
- Unit 2: Health and Social Care Values

##### Additional Units:

- The Impact Of Diet
- Promoting Health and Wellbeing

In this new specification students are required to take one externally moderated unit in Human Lifespan

Development (as shown above) which will take place in Year 10 giving time for students to develop their understanding of the components of the subject. Candidates must pass Unit 1 and 2 at Level 2 in order to be awarded a Level 2 qualification at the end of the course.

Coursework is set as a series of assignments which involve researching topics, writing up to meet assessment criteria, proof reading and re-drafting.

GCSE Home Economics: Food & Nutrition (YEAR 11)

In this course you will study a range of topics including:

- Nutrition and healthy eating
- Food processing
- Food safety and hygiene
- Sensory testing • Food investigation and experimental work
- Testing of existing products
- Food for different dietary needs

Practical skills will be developed in:

- Cake, biscuit and pastry making
- Sauces, rice and pasta dishes
- Use of basic ingredients
- Food for vegetarians, special diets • Methods of cooking food
- Cook chill products
- Desserts
- Use of a range of equipment

## ASSESSMENT

### Coursework (60%)

Students select two final projects which are a mixture of practical work and supporting portfolio.

### Examination (40%)

1 written paper – 1½ hours.

Students will be expected to attend extra-curricular sessions after school when making their final project.

Students will be expected to work safely and hygienically at all times.

### Product Design (YEAR 11)

During this final year, students are focusing on their final project. 60% of the final grade is allocated to this section and is therefore very important. By October students should have completed most of the folder work and beginning to produce the outcome of their designs. Students still have time to improve on sections of their folder that are weak and thus improve their overall grade. The mock examination is a past paper and its aim is to give students a feel for the real thing. The final examination is 40% of the overall GCSE grade.

### Resistant Materials (YEAR 11)

During this final year, students are focusing on their final project. 60% of the final grade is allocated to

this section and is therefore very important. By September students should have completed most of the folder work and made a start on making the practical outcome of the project. Students still have the time to improve on sections of their folder that are weak and thus improve their overall grade. The mock examination is a past paper and its aim is to give students a feel for the real thing. The final examination is 40% of the overall GCSE grade.

#### BTEC FASHION & CLOTHING LEVEL 2 AWARD (YEAR 11)

This course continues from Year 10 so will have already introduced you to Fashion & Clothing and enabled you to extend and develop your knowledge and practical skills.

What you will continue to do:

- Aim to develop your personal qualities and attitudes across a wide range of assignments which focus on technical training and design realisation, which is essential for career development in the fashion industry.

- Give you an introduction to all fashion related subjects. You will gain a clear understanding of the whole design process, from trend prediction to in-store promotion.
- Develop your own style of illustration through observational drawing, and will also be taught an industry led computer software package Adobe Photoshop.
- Emphasis is placed on professional practice, with regular 'live' projects set by practising designers and professionals.
- You will be given the opportunity to participate in a wide range of educational visits to local and national museums and galleries; events such as Graduate Fashion Week and The Clothes Show Live.

#### Assessment

##### Coursework (75%)

Students will work on a selection of Fashion focused projects to produce a body of work which will be internally assessed.

##### Examination (25%) ~ taken in Year 11

1 final piece – 10 hours (students will have 20 hours lesson time to plan and prepare this).

#### What can I do next?

This course will help prepare you for progression onto further education. There are a variety of career opportunities relating to fashion including: designer menswear, womenswear or children's wear, visual merchandiser, buyer, stylists etc.