

Design and Technology

Statement of Intent:

At GWA Design and Technology is a dynamic subject, inspiring the next generation of 'imagineers' through creative design and exploration of techniques and processes. The teaching of valuable skills equips our students for their future lives. We nurture a passion for sustainable and innovative approaches to design. We inspire creativity and encourage our students to be proactive in their own understanding of risk management thus developing confident, independent and responsible designers. We want students to build a critical appreciation of the work of others and use this to inform their own design practice. Our students leave with a passion for quality design and a respect for the contribution this makes to culture, society, environment, well-being & economy.

Students will develop their knowledge and understanding of nutrition, healthy eating, food preparation, hygiene, cooking techniques, and sensory characteristics. We encourage the development of high skills and resilience in a safe environment, allowing students to demonstrate commitment and act on feedback. The lessons empower students to enable them to follow a recipe and substitute ingredients and cooking methods as appropriate, demonstrating an understanding of food choices and food science. We engage with students to encourage them to understand the environmental factors involved with preparation and the cultural difference in foods.

KS3

The Key stage 3 curriculum is taught through the discreet material areas of product design, graphics, textiles and Food. Each course is designed to prepare our students for GCSE as we believe in a 5 year course and as such we work towards preparing our students for Year 11 NEA and exams from Year 7 upwards. Students develop their understanding of the iterative design process and use this to solve design problems and test their ideas in the form of high quality prototypes. Skills and techniques are embedded throughout KS3 and students build a repertoire of knowledge that allows them to take creative risks and develop original solutions to design problems. Students research the work of others and use this to further develop their own designs & to help evaluate and refine their ideas. The ability to communicate ideas and designs is explored and refined and maths, literacy and science are embedded into lessons. STEM activities are planned to enhance and further develop curiosity and practical problem solving.

Within Food pupils will build knowledge and apply the principles of nutrition and health by cooking a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet. They will become competent in a range of cooking techniques through scheduled practical activities to include understanding the characteristics of ingredients. Students will be taught to plan practical's effectively considering health and safety in addition to clear time management. Students will research to understand the source, seasonality and characteristics of a broad range of ingredients.

As a department we support the 'skillsbuilder' steps and the teaching of these form a key part of our curriculum. All skills are embedded in the teaching and learning at KS3 with one skill being focused on in greater depth. In doing so our students are equipped with key transferable skills needed for success in their future careers.

Skill	Year 7	Year 8	Year 9
Teamwork			X
Leadership			
Creativity		X	
Problem Solving	X		
Listening			
Presenting			

KS4

GCSE in Design Technology (AQA)

This exciting and inspiring qualification encourages students to design and make products with creativity and originality in a variety of practical activities, using a range of materials and techniques. Students will undertake a spectrum of projects exploring the different stages of Design and Manufacture that would be used in commercial practices. This course allows students the freedom to work in any material on a brief that they find engaging. The course teaches students what they need to know to become modern designers and addresses the challenges they face in the 21st Century, undertaking learning of scientific theory throughout their learning.

GCSE in Food Preparation and Nutrition (AQA)

This qualification develops students' knowledge and understanding of a wide variety of topics linked to food including nutrition, the science behind food, food hygiene and safety, food commodities, food processes, as well as explicit technical and practical skills. Practical lessons will be key to understanding food ingredients, exploring recipes and developing students own food dishes.

GCSE in Art and Design: Textile Design AQA

This exciting course focuses on learning through practical and creative experience. Students will learn by being hands on, learning and trying out new and exciting ways of being creative within fashion and textiles. Students will explore different textile techniques and research the work of fashion designers and textiles artists to help enrich and develop their own work.

Students are marked on 4 areas at GCSE:

Assessment objective 1 - A01 Development of Ideas & Contextual Studies

Assessment objective 2 - A02 Experimentation with materials, processes, ideas, techniques, colour & scale.

Assessment objective 3 - A03 Recording through the use of photography, mind maps, drawing, painting.

Assessment objective 4 - A04 Personal Response. The final piece/s & written evaluation to the project.

Each assessment objective is worth 25% of the final grade.

KS5

A-levels in Product Design (AQA)

This creative and thought-provoking qualification gives students the practical skills, theoretical knowledge and confidence to succeed in a number of careers, especially those in the creative industries. They will investigate historical, social, cultural, environmental and economic influences on design and technology, whilst enjoying opportunities to put their learning into practice by producing prototypes of their choice using the iterative design process. Students will gain a real understanding of what it means to be a designer, alongside the knowledge and skills sought by higher education and employers. A key requirement of the course is the use of mathematical skills and these will be tested in the exams.

An understanding of scientific theory is also expected. Students will study:

- Materials and their applications
- Performance characteristics of materials
- Enhancement of materials
- Design and making principles.

Art and Design: Textile Design AQA

In A-level Art and Design: Textile Design you will develop your own skills and knowledge through creative exploration. You will be given themes to inspire, together with technical guidance & contextual stimulus you will develop original projects and fashion & textile outcomes. You will learn how to use an extensive range of techniques and processes that embrace the 3 areas of embroidery, print & weave. Fashion illustration & portfolio & sketchbook presentation is also taught and individual style is nurtured. Lessons are practical where students develop their project while receiving support and guidance to help further their own creative journey. New techniques and skills are fed into the course and students create technical & contextual sketchbooks that supports their own project development.

IMPLEMENTATION:

ADT feedback Policy:

In order to ensure that students make the best progress possible, homework is set as appropriate, at least 3 times a half term via MS Teams and teacher feedback is given. Class work should show clear feedback either peer-assessed/ self-assessed or teacher assessed.

There should be clear evidence of DIRT in students' books in purple pen. Students should record feedback on sheets created by staff at the start of each term that is stuck in their book. Students will be expected to record the feedback given and where the piece of work is located.

Schemes of Learning:

Our schemes of learning include:

Long term overviews:

- Clear links to prior learning (Y7 linked to KS2, Y7 to Y8 and so on)
- Topic outline summarising key content

Medium term plans:

- Root enquiry and key enquiry questions
- Key Knowledge, Skills and Understanding (delivered through know, apply, extend learning objectives/outcomes)

MEDIUM TERM

Click on the links below:

[Year 7](#)

[Year 8](#)

[Year 9](#)

[Year 10](#)

[Year 12](#)

[Year 13](#)

- Duration
- Planned assessment of student progress and impact of taught curriculum
- Assessment and improvement opportunities (DIRT) – during lesson time and homework activities
- Literacy and Numeracy
- Opportunities to extend learning
- Enterprise skills in the form of projects
- Appropriate challenge and differentiation opportunities

IMPACT:

ONGOING TEACHER ASSESSMENT

Our schemes of learning focus on assessment and improvement opportunities and the Design and Technology Department is committed to providing regular and timely written and verbal feedback in line with the school's policy. This enables ongoing reflection on the impact of the curriculum on student progress

INTERNAL EXAMINATION RESULTS

Students undertake three key assessments against GCSE success criteria in each year 7-9. At KS4 and 5, assessments are termly. On each occasion, teaching staff evaluate the impact of the curriculum by assessing student progress against stated learning objectives. Formal exams are conducted at the end of each year, offering a further opportunity to assess student progress and make judgements about the impact of the taught curriculum.

EXTERNAL EXAMINATION RESULTS

At KS4 and 5, our results in national examinations will be a clear measure of the impact of the curriculum. These results will be the culmination of a data trail tracking from a student's first term at GWA as part of the school's annual data collection and reporting of progress cycle.

ENTERPRISE SKILLS

In line with the whole school drive on Enterprise skills, the explicit teaching against 'Skillsbuilder' steps is measured through students evidencing progress within their tracking tool, with the department leading on chosen skills in each year.

IMPACT

WORK REVIEWS

We learn from the 3 annual school work reviews and conduct our own moderation of exercise books and assessments in a clear cycle of department meetings throughout the year.

STUDENT SURVEYS

The Design and Technology department survey's students in all year groups annually, seeking student feedback on the effectiveness of the taught units from a learner point of view and harvesting student voice to ensure the curriculum is kept lively, engaging and relative.

MODERATION

Annual moderation meetings take place within the department to provide quality assurance and better support department wide reflection on the impact of the curriculum.

Where possible (and appropriate) opportunities for external moderation with other high performing schools are sought.

DESTINATIONS

The eventual destinations of students, and the extent to which they are able to lead happy, successful lives, will be the ultimate measure of curriculum impact.

Read the department annual Curriculum Impact Report for more information