

Design Technology

Curriculum Overview

All children are entitled to a curriculum and to the powerful knowledge which will open doors and maximise their life chances. Below is a high-level overview of the critical knowledge children will learn in this particular subject, at each key stage from Year 7 to Year 11, in order to equip students with the cultural capital they need to succeed in life. The curriculum is planned vertically and horizontally giving thought to the optimum knowledge sequence for building secure schema.

Knowledge, skills and understanding to be gained at each stage*			
	Cycle 1	Cycle 2	Cycle 3
YEAR 7	Students will explore the Design Process including the creation of design ideas and developing presentation/drawing skills. They will also be introduced to basic wood working skills and techniques.	Students will be developing the skills from cycle 1 of basic wood working skills and techniques using a range of tools and machinery developing a strong understanding of health and safety in the workshop. Introduction to clock construction techniques and skills.	Students will develop clock construction techniques and skills, as be introduced to laser cutting as a manufacturing technique.
YEAR 8	Students will be exploring the development of a final design and planning the assembly of their picture frame final design. Continued development of presentation/drawing skills. Introduction to the manufacture and assembly of the corner halving joint.	Students will manufacture and assemble the corner halving joint. Introduction to picture frame construction techniques and skills (manufacture of their final picture frame design).	Students will explore picture frame construction techniques and skills (manufacture of their final picture frame design).
YEAR 9	<p>Unit 1: Introduction to specialist pathways in Art and Design</p> <p>Within this unit, students will have the opportunity to develop the skills and techniques learnt in KS3. They will also develop their skills and techniques further, exploring more advanced craft techniques and processes including laser etching/cutting, wood turning and casting of metal. Within the brief, students will be able to work within the following disciplines; design crafts, product design and visual communication. Students will learn how to select specialist techniques, adhere to health and safety guidance, complete risk assessments whilst maintaining an ongoing journal of working practice. Within their journal of practice, they will develop a language allowing them to record the formal elements whilst reviewing and evaluating their progress</p>		
YEAR 10	<p>Unit 4: Communicating ideas in 3D</p> <p>Within this unit, students will be given the exciting opportunities for 3D designing and making. They will be given the opportunity to experiment with a wide range of resistant materials, developing techniques in modelling, constructing, carving, laser cutting, joining and moulding. Through their investigations, they will explore and investigate examples of 3D work by designers and crafts people they will find inspiring examples to stimulate and develop their own creative work.</p>		
YEAR 11	<p>Unit 6: Contextual References in Art and Design</p> <p>Within this unit, students will investigate historical and contemporary practice, developing their knowledge and understanding of key movements, and the influence major movements have on contemporary design. They will also investigate the factors in creative production, taking into account economic and social issues. As well as developing contextual knowledge, students will develop their understanding of the production of the designs through practical investigations.</p>	<p>Unit 2:</p> <p>Externally set task</p>	

*A powerful, knowledge-rich curriculum teaches both declarative knowledge (facts; knowing that something is the case; what we think about) and non-declarative or procedural knowledge (skills and processes; knowing how to do something; what we think with). There are no skills without bodies of knowledge to underpin them.



In some subjects, a further distinction can be made between substantive knowledge (the domain specific knowledge accrued e.g. knowledge of the past) and disciplinary knowledge (how the knowledge is accrued e.g. historical reasoning).

Please refer to the DAT Curriculum Principles, published on our website, for further information about how we have designed our all-through curriculum.