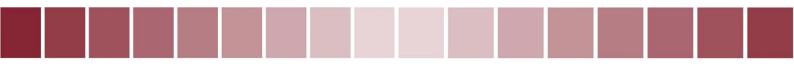


D&T: KS5 Product Design *(Pearson Edexcel – 9DT0)*

Programme of Study - Overview

Learning Area Leader Miss C Scanlan Second in Dept and Subject leader Mr J Housego



Overview of KS5 PD curriculum





YEAR 12	Introduction – The first two terms are	Interior design	Tooth brush project	Tooth brush	Begin NEA	NEA –
Pearson Edexcel	about building up student's skills through a	project looking	– Introduction to 3D	project – The	(coursework)	Specification and
Level 3 Advanced	series of small-scale design and make	at developing	printing and Fusion	second part of	Identification	initial generation
GCE in Design and	tasks. These will be based about the	the sixth form	360. The first part of	the this project	and	of design ideas
Technology -	possible project routes they could take for	study area.	this product looks at	looks at	investigation of	
Product Design	their NEA (coursework). Theory will be	Manufacture	product design and	packaging,	a design	
(9DT0)	interleaved in during the course.	and evaluation.	development.	branding,	possibility.	
				marketing and		
Summer Bridging	Interior design project looking at	Lighting project.	Till roll dispenser.	promotion.	Investigation of	
work on research	developing the sixth form study area.		Making use of		needs and	
into key design	Research and design development.	Theory	mechanical fixtures	Till roll dispenser.	research	
movements		Processes,	and fittings.			
	Lighting project.	techniques and	Learning about	Theory		
a) Arts and Crafts –		specialist tools	different joining and	Designing for		
William Morris	Theory	(3).	production	maintenance and		
b) Art Nouveau –	Factors influencing the	Digital	methods	the cleaner		
Charles Rennie	development of products (5).	Technologies		environment (9).		
Mackintosh	Anthropometrics,	(4).	Theory			
c) Bauhaus	Ergonomics,	Manufacturing	Effects of			
Modernist –	Design movements.	processes	technological			
Marianne Brandt	Materials (1).		Developments (6).			
d) Art Deco – Eileen	Performance		Features of			
Gray	characteristics of		manufacturing			
e) Post Modernism	materials (2).		industries (8).			
– Philippe Starck						
f) Streamlining –						
Raymond Lowey						
g) Memphis –						
Ettore Sottsass.						

	NEA Design Ideas and Development	NEA Final	NEA Making of		Final	
YEAR 13	NEA – Design Ideas and Development	NEA – Final	NEA - Making of	NEA - Evaluating	Final	
Pearson Edexcel		design, planning	final prototype	own design and	Examination	
Level 3 Advanced	Theory - Further processes and	and Making of		prototype		
GCE in Design and	techniques (12).	final prototype	Theory - Current			
Technology -			legislation (10).	Theory – Final		
Product Design		Theory - Safe		Exam		
(9DT0)		working		preparation.		
		practices,				
		potential				
		hazards and risk				
		assessment (7).				
		Information				
		handling,				
		modelling and				
		forward				
		planning (11).				

Rationale

We are continually striving to implement the latest technology into the curriculum as well as building a sound knowledge base through practical experiences.



Kings Langley School Unlocking Potential for Life

Component 2: Independent Design and Make Project (Paper code: 9DT0/02)

Non-examined assessment

50% of the qualification

120 marks

Content overview

- Students individually and/or in consultation with a client/end user identify a problem and design context.
- Students will develop a range of potential solutions which include the use of computer aided design and evidence of modelling.
- Students will be expected to make decisions about the designing and development of the prototype in conjunction with the opinions of the client/end user.
- Students will realise one potential solution through practical making activities with evidence of project management and plan for production.
- Students will incorporate issues related to sustainability and the impact their prototype may have on the environment
- Students are expected to analyse and evaluate design decisions and outcomes for prototypes/products made by themselves and others
- Students are expected to analyse and evaluate of wider issues in design technology, including social, moral, ethical and environmental impacts.

Assessment overview

- · The investigation report is internally assessed and externally moderated.
- Students will produce a substantial design, make and evaluate project which consists of a portfolio and a prototype
- The portfolio will contain approximately 40 sides of A3 paper (or electronic equivalent)
- There are four parts to the assessment:
 - Part 1: Identifying and outlining possibilities for design
 Identification and investigation of a design possibility, investigation of client/end user
 needs, wants and values, research and production of a specification

o Part 2: Designing a prototype

Design ideas, development of design idea, final design solution, review of development and final design and communication of design ideas

Part 3: Making a final prototype

Design, manufacture and realisation of a final prototype, including tools and equipment and quality and accuracy

• Part 4: Evaluating own design and prototype Testing and evaluation

Assessment Objectives

Student	% in GCE A Level	
A01	Identify, investigate and outline design possibilities to address needs and wants	15
A02	Design and make prototypes that are fit for purpose	25
AO3	 Analyse and evaluate design decisions and outcomes, including for prototypes made by themselves and others wider issues in design and technology 	25
A04	Demonstrate and apply knowledge and understanding of • technical principles • design and making principles	35
Total		100%

Breakdown of Assessment Objectives

	Assessment Objectives				Total for all
Component	A01 %	AO2 %	AO3 %	AO4 %	Assessment Objectives
Component 1: Principles of Design and Technology	-	-	15	35	50%
Component 2: Independent Design and Make Project	15	25	10	-	50%
Total for GCE A Level	15%	25%	25%	35%	100%

NB Totals have been rounded either up or down.