

KS4 Curriculum Graphics

CURRICULUM INTENT

What does Graphics help young people achieve at KS3? Why have you made these curriculum choices?

“GSCE” standard and present in a NEA formats. Pupils use advanced skills such as Rendering and 3D modelling.

Yr 11 - Graphics allows pupils to explore designing in both drawing, modelling and CAD. Pupils can use design influences and use real life topics for their projects that prepare them for a GCSE in D&T (paper and boards route / graphics). Each segment of the subject is a mini version of the assessment objectives that are needed for the N.E.A for year 10/11.

TERM BY TERM BREAKDOWN – Knowledge, acquired and skills developed:

Year 10 Course Outline	Year 11 Course Outline	Opportunities beyond the classroom
<p><u>AUTUMN / SPRING / SUMMER TERM</u> Core skills (enhanced) PAGE LAYOUT <i>Pupils learn about vectorising and proportion, colour theory.</i> <i>Pupils learn about the design process and the need for user opinions and how to modify designs as a result. ITERATION</i> <i>Rendering of the casing to GCSE/ pro standards to allow challenge.</i> Metals , papers and board, polymers and timbers <i>Illustration</i> <i>Sketching</i> <i>3d drawing (crating, shading and rendering)</i> <i>User feedback and adapting designs.</i> <i>Socratic testing</i> <i>Learning journey made for skills.</i> Prep for NEA. <i>Spider diagrams , making choices</i> <i>Research into cultures and trends</i> <i>User profiles</i></p> <p><u>AUTUMN TERM</u></p> <p>TOKYO SIGNAGE PROJECT- NEA MINI PROJECT <i>User needs and trends (colours, themes etc)</i> <i>Geometric construction in drawings:</i> <i>Construction of arcs and shapes using technical instruments.</i> <i>Use of info graphics, pictograms.</i> <i>Creation of style guides. Event theming for a brief.</i> <i>Advanced CAD skills</i> <i>Design iterations for new uses.</i> <i>Materials choices and materials in outdoor use.</i></p> <p><u>SPRING TERM</u> PRET FOOD PACKAGING- NEA MINI PROJECT <i>Reverse engineering and recording data.</i> <i>Net development</i> <i>Card modelling techniques</i> <i>Numeracy and layout skills (areas and materials sizes)</i> <i>Movement in drawings (openings and pull outs)</i></p>	<p><u>AUTUMN / SPRING / SUMMER TERM</u> Paper and Boards Core skills (50%) <i>CAD (2d drawing and layout skills)</i> <i>Typography</i> <i>Illustration</i> <i>Marker rendering</i> <i>Model making skills (packaging)</i> <i>Orthographic, perspective and Isometric drawings.</i> <i>Materials</i> <i>Paper making process</i> <i>Construction</i> <i>Surface finishes</i> <i>Modern materials</i></p> <p><i>Theory into:</i> <i>Metal, wood and polymer types and processes using them as lesson and HW</i></p> <p>PRINTING AND TYPOGRAPHICS AND DRAWING <i>Pupils will learn about CMYK (litho/flexo) printing and how images are made up.</i> <i>They will learn about crop marks and colour registration. This will be added to their final design NET in order to make a "print ready" product.</i></p> <p><u>AUTUMN TERM</u> NEA PROJECT 2.3 Development of a chosen design <ul style="list-style-type: none"> • <i>Technical development</i> • <i>Manufacture and special processes</i> • <i>Graphical choices and professional presentation (layout and reg marks)</i> • <i>Materials choices</i> • <i>Scales/ full sized model</i> 2.4 Review of Chosen design <ul style="list-style-type: none"> • <i>User feedback and alterations</i> • <i>Parts list as a result of fine-tuned design</i> • <i>Evaluation against the spec</i> </p> <p><u>SPRING TERM</u> 3.1 – 3.1B – 3.2 Manufacture, skills and processes, Quality and accuracy <ul style="list-style-type: none"> • <i>Detailed making plan</i> • <i>Jigs, templates and computer prep</i> • <i>Processes and machinery identified</i> </p>	<p>Opportunities beyond the classroom</p> <p>Pupils are given HW that extends their knowledge further:</p> <ul style="list-style-type: none"> • <i>Design inspirations from around the world. (used in products)</i> • <i>Packaging research, reverse engineering and design layout of packaging for existing products.</i> • <i>Pupils are encouraged to get user feedback and to base ideas on specifications.</i> • <i>Pupils are encouraged to purchase rendering markers, try out techniques and home.</i> <p>Pupils use are encouraged to apply design ideas to real life objects and to present them as a real designer would. Teacher to feed ideas from their experience (architecture, graphic design) To inspire pupils. This will include famous designers and designs that they should learn from.</p> <p>Possible design competitions Primary liaisons in school at the primary to increase knowledge.</p> <p>User feedback and testing to be “real life” and prepare pupils for collect, university or jobs in design</p>

<p><i>Exploded drawings. Logo branding and surface techniques Plastic techniques (vacuum forming) interior moulds Understanding the NEA process through PowerPoints.</i></p> <p><u>SUMMER TERM</u> NEA START - June</p> <p>1.1-1.2 <i>Pupils topic choices Research and context identified User profile created and initial thoughts in PowerPoint. This leads into year 11 NEA tasks shown.</i></p> <p><i>Research and user profile completed, and locations, users and wider market presented over summer holidays as summer project.</i></p> <p>1.2 Specification <i>Specification and requirements for the user and product. Video, photographic evidence needed.</i></p> <p>2.1 Design Ideas <i>Wide range of sketches (aim for 3D) with annotation</i></p> <ul style="list-style-type: none"> • <i>Design developments</i> • <i>Model prototypes and experiments</i> • <i>Sustainability of designs</i> <p>2.2 Review of ideas</p> <ul style="list-style-type: none"> • <i>Critical analysis of ideas</i> • <i>How to take the design forward</i> • <i>What do improve and further technical research.</i> • <i>User feedback and responding to it.</i> 	<ul style="list-style-type: none"> • User feedback <p>Making Diary – Evidence:</p> <ul style="list-style-type: none"> • Templates used for accuracy • Stages followed from plan • Pupils show care in making outcome • Graphics made and applied to high standard • Errors and modifications are shown, and improvements are made. <p>4.1 Evaluation and testing</p> <ul style="list-style-type: none"> • How well product meets spec • How well product meets user needs • Hand on testing with evidence • Sustainability and Moral, Social, Cultural issues covered <p>Improvements identified and designed.</p> <p>Project internally moderated. <i>Presentations prepared for copying to USB and submission to exam board. Video commentary made by teacher</i></p>	
<p>Key Independent Learning Resources</p>		<p>GREAT READS</p>
<p>The Materials Sourcebook for Design Professionals Hardcover</p>		<p>Product Design Styling By Peter Dabbs</p> <p>Origins: The Creative Spark Behind Japan's</p> <p>Best Product Designs – 9784770030405</p> <p>Archidoodle: An Architect's Activity</p> <p>Book Paperback – Illustrated</p>

	
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