



CURRICULUM PLAN

GRAPHICS

BRAMHALL HIGH SCHOOL

Curriculum Intent

YEAR 7

DMA projects that help students to develop the skills, knowledge and understanding to design and make high quality 3D products and to communicate their design journey.

YEAR 8

DMA projects that help students to develop the skills, knowledge and understanding to design and make high quality 3D products and to communicate their design journey.

YEAR 9

DMA projects that help students to develop the skills, knowledge and understanding to design and make high quality 3D products and to communicate their design journey.

YEAR 10

DMA projects that help students to develop the skills, knowledge and understanding to design and make high quality 3D products and to communicate their design journey.

YEAR 11

DMA projects that help students to develop the skills, knowledge and understanding to design and make high quality 3D products and to communicate their design journey.

YEAR 7

Term	Programme of Learning	Links to the National Curriculum / Specification / Additional	Assessments	What extra learning opportunities are planned?	Disciplinary Literacy
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Yr 7 students remain in a D&T subject for 12 weeks. Yr7 students rotate around all D &T subjects – 3 rotations in Yr7 and 2 in Yr8</p>	<p>Students create a personalised CD of themselves. They use a digital camera and upload the images from FOLDR. Drawings are traced using light boxes and the images are scanned, edited and coloured using CS6. Students then experiment with filters and layers and design their own CD using existing examples as inspiration.</p> <p><i>(learning & developing)</i></p> <p>Skills, Knowledge and Understanding</p> <p>Creation of folders Target market</p>	<p>A = AIMS D = Design M = Make E = Evaluate T = Technical Knowledge</p> <p>A1, A2, A3, D3, D4, D5, M1, M2, E3</p>	<p>See assessment planning</p> <ul style="list-style-type: none"> • Front cover • Hand drawn CD - planning • Band Ideas page • Scanning and editing • Filters and effects • Final CD 	<p>Subject design competitions</p> <p>3D printer club</p> <p>Ambassadors meetings & tasks</p>	<p>Photograph</p> <p>Download</p> <p>Trace</p> <p>Crop</p> <p>Place</p> <p>Baby Bear (slang)</p> <p>Double-click</p> <p>Right & Left click</p> <p>Ungroup</p> <p>Silhouette</p> <p>Line-Art</p> <p>Scan (PNG File)</p> <p>Edit</p>

	<p>CD Research & analysis – specification Use of digital camera</p> <p>Tracing using light box</p> <p>Downloading from VLE</p> <p>Booklet creation</p> <p>Scanning – photoshop Editing – Illustrator Coloring – Illustrator & Photoshop Vector and bitmap awareness</p> <p>Downloading simple backgrounds Simplistic experimentation with layout Creation of final product</p> <p>Evaluation against design criteria</p>				<p>Layer</p> <p>Rasterise</p> <p>Place inside container</p> <p>Filter gallery</p> <p>Save-as</p> <p>Specification</p> <p>Survey</p> <p>Social Media</p> <p>QR Code</p> <p>Bar Code</p> <p>Booklet</p>
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YEAR 8

Term	Programme of Learning	Links to the National Curriculum / Specification / Additional	Assessments	What extra learning opportunities are planned?	Disciplinary Literacy
<p>Y8 students remain in a D&T subject for 12 weeks for 2 more rotations and then study mini-projects for 5 Weeks – rotating 5 times. COVID WILL IMPACT on this</p>	<p>Students create a personalised ring for themselves using the 3D Printer. Students measure each other's hands to appreciate anthropometric data and its importance when designing products to be used/worn. Students design a variety of ring designs by hand before tackling the 'Sketch-up programme'. Rings are coloured, viewed and client-oriented views are generated. Promotional materials and 3D packaging (time allowing).</p> <p>Meeting set deadlines Independent creation</p>	<p>A = AIMS D = Design M = Make E = Evaluate T = Technical Knowledge</p> <p>A1, A2, A3, D3, D4, D5, M1, M2, E2, E3, E4, T4</p>	<p>See assessment planning</p> <ul style="list-style-type: none"> • Anthropometric data • Hand drawn rings/isometric sketching • Sketch-up ideas • Views • Promotion / launch • Final RING 	<p>Packaging extension tasks for the more able.</p> <p>Promotional material to sell the products</p>	<p>Sketch-up</p> <p>Toolbar</p> <p>large toolset</p> <p>Anthropometric data</p> <p>Bespoke</p> <p>Leonardo Davinci</p> <p>Average / mean</p> <p>Use of mm</p> <p>Diameter</p> <p>Radius</p> <p>push & pull</p> <p>Isometric sketch</p>

	<p>of design work Planning time effectively Problem & design brief understanding Target market clarified and explored CD Research & analysis – specification Use of SKETCH-UP programme Tracing using light box – isometric 3D sketching Downloading from VLE 2D exporting of images Use of CAD & CAM – 3D Printer (not block modelling) Powerpoint creation to promote a product Anthropometric data – understanding Downloading backgrounds independent experimentation with layout Creation of final</p>				<p>Upload & download 3D printer Export 2d Graphic Export 3D Graphic Depth Thickness Width Upload Target Market Base</p>
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	<p>product Creativity and originality Evaluation against design criteria Presentation in a booklet</p>				
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YEAR 9

Term	Programme of Learning	Links to the National Curriculum / Specification / Additional	Assessments	What extra learning opportunities are planned?	Disciplinary Literacy
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Y9 students remain in a D&T subject for 18 weeks. Students then rotate 2 or 3 rotations dependent upon staffing/option popularity and group size</p>	<p>Students create a 3D promotional material for a new movie of their choice. All folder work uses CS6 and is A3 sized. Students select a theme and develop images for their movie. Images are drawn/traced, scanned, edited and coloured. Layouts are considered, and a final 2D cinema stand is designed. The 3D element utilises 2D Design programme, where a 1:5 scale stand is modelled and made using GX300.</p> <p style="color: blue;">Working as an individual</p> <p style="color: orange;">Select design theme</p> <p style="color: red;">Planning time</p> <p style="color: blue;">effectively to utilise lesson and home tasks</p>	<p>A = AIMS D = Design M = Make E = Evaluate T = Technical Knowledge</p> <p>A1, A2, A3, D3, D4, D5, M1, M2, E2, E3, E4, T4</p> <p>A1, A2, A3, D3, D4, D5, M1, M2, E3</p>	<p>See assessment planning</p> <ul style="list-style-type: none"> • Thought shower • Film ideas • Image development • 3D modelling of stand • Stand development 1 • Stand development 2 • Final stand • Problem & Design Brief 	<p>A series of skills, knowledge and understanding lessons support the projects.</p> <p>Students rotate round and experience a bespoke programme where they learn essential elements for their examination.</p>	<p>Folder</p> <p>Download</p> <p>Trace</p> <p>Crop</p> <p>Place</p> <p>Baby Bear (slang)</p> <p>Double-click</p> <p>Right & Left click</p> <p>Ungroup</p> <p>Silhouette</p> <p>Line-Art</p> <p>Scan (PNG File)</p> <p>Edit</p>

	<p>Problem & design brief mastery Target market mastery</p> <p>CD Research & analysis – specification mastery Use of digital camera mastery Tracing using light box mastery Downloading from VLE mastery</p> <p>Use of VLE for independent study Booklet creation mastery Use of CAD & CAM – cnc GX 300 mastery Independently Scanning – photoshop mastery Independently Editing – illustrator mastery Independently Coloring – CS6 – EMF File mastery Vector and bitmap understanding & mastery Background experimentation and</p>				<p>Layer</p> <p>Rasterise</p> <p>Place inside container</p> <p>Filter gallery</p> <p>Save-as</p> <p>CAD & CAM</p> <p>Cam Machine</p> <p>Scale 1:1 1:5 1:10 etc</p> <p>Net / Development</p> <p>2D Design</p> <p>Gridlock / attach tool</p> <p>CNC Output</p> <p>Cut by Colour</p> <p>Passes, Force, Speed</p>
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	<p>innovation Experimentation & layout mastery Creation of final layouts – apply criteria Independent reativity and originality Evaluation against design criteria Hand skills mastery classes</p>				<p>Spray mount & Contact adhesive</p>
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YEAR 10

Term	Programme of Learning	Links to the National Curriculum / Specification / Additional	Assessments	What extra learning opportunities are planned?	Disciplinary Literacy
Term 1a	<p>Key Ring 'ready for sale' Design task.</p> <p><i>(strict non-negotiable design criteria)</i></p> <p>Key Ring using the Laser Cutter.</p> <p>Images are scanned, edited and are then either coloured using Photoshop or Imported into Lightburn where the Image Is manipulated into a key ring.</p>	<p>AQA Specification - full coverage</p> <p>REPEATED PROJECT ALLOWING ALL STUDENTS TO ACCESS</p>	<p>Individual elements are assessed but the whole project must fit on one A3 page.</p> <p>Sketching Imagery</p> <p>Scanning (Photoshop) Editing (Illustrator) Colouring (Photoshop)</p> <p>Lightburn keyring design</p> <p>Layout of page of all elements including the 3D Process of laser cutting.</p>	<p>3rd angle orthographic projection, Smart & modern materials Isometric projection</p> <p>Packaging of product time permitting.</p>	<p>Scan PNG file</p> <p>Edit place ungroup smart-object rasterize layers outline etch & cut</p> <p>Lightburn Import / export Vacuum forming Thermoplastic Mould</p>

<p>Term 1b</p>	<p>Rotations within D&T will occur, this is dependent upon the number of groups. Either 3 or 4 rotations dependent upon popularity</p>	<p>REPEATED PROJECT ALLOWING ALL STUDENTS TO ACCESS</p>	<p>MOCK 1 – Students sit a full GCSE Mock Exam. (<i>non- aided the design theme is not shared with students</i>)</p>	<p>Printing techniques Exploded drawings Crating</p>	
<p>Term 2a</p>	<p>Rotations within D&T will occur, this is dependent upon the number of groups. Either 3 or 4 rotations dependent upon popularity</p>	<p>REPEATED PROJECT ALLOWING ALL STUDENTS TO ACCESS</p>	<p>Brain storm, Target Market, Anthropometric Data, Ideas, Development and modifications, Research, 6-R's, Sketch-up journey, Views, Evaluations x 3</p>	<p>Students create a 25min lesson in pairs to teach to the class.</p>	

<p>Term 2b</p>	<p>Glasses Case '3D Packaging' Design task. (brief available on request)</p> <p><i>(strict non-negotiable design criteria)</i></p> <p>Students are taught to design a 3D product using sketching modelling, 3D modelling, 2D Design Cad & Cam modelling.</p> <p>Students mind map the educational theme and design a glasses case which meets the given brief.</p>		<p>MOCK 2 – Students sit a full GCSE Mock Exam.</p> <p><i>(students are supported with the theme and are prepared within lessons)</i></p> <p>Brain storm, Target Market, Anthropometric Data, Ideas, Development and modifications, Research, 6- R's, Sketch-up journey, Views, Evaluations x 3</p>	<p>Students teach their own prepared lessons on specific knowledge areas. Smart/Modern materials booklets created</p>	<p>layer push and pull arthrometric data accuracy large-tool set Export 2D graphic Export 3D graphic Sketch Developing idea Modifications Target market Needs & wants</p>
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<p>Term 3a</p>	<p>Sketchup – driving test, 3D sketching – crating Cloudburst, Investigation into the 6 R's, Freehand ideas, paper engineering, modelling using card. 2D Desig modelling. A detailed evaluation against: Design criteria, Initial intentions, 3rd party opinion</p> <p>Repeat modelling to finalise the design QC pass & fail explored and evidenced. Photos of final product</p>	<p>Options – students opt for their favourite D&T Subject</p>	<p>Brain storm, Target Market, Anthropometric Data, Ideas, Development and modifications, Research, 6-R's, Sketch-up journey, Views, Evaluations x 3</p>	<p>Students teach their own prepared lessons on specific knowledge areas. Smart/Moderm materials booklets created.</p>	
<p>Term 3b</p>	<p>GCSE PROJECT THEMES ARE RELEASED BY AQA</p> <p>Students are made aware of the dept limitations for their CA projects.</p> <p>CONTROLLED ASSESSMENT STARTS</p>		<p>Projects negotiated and deadlines agreed before summer break.</p> <p>4 A3 pages min requirement</p>		

YEAR 11

Term	Programme of Learning	Links to the National Curriculum / Specification / Additional	Assessments	What extra learning opportunities are planned?	Disciplinary Literacy
Term 1a	CONTROLLED ASSESSMENT		<p>MOCK 3 – Students sit a full GCSE Mock Exam. (students are supported with the theme and are prepared within lessons)</p> <p>Mock feedback session</p>		
Term 1b	CONTROLLED ASSESSMENT		<p>MOCK 3 – Students sit a full GCSE Mock Exam. (students are supported with the theme and are prepared within lessons)</p> <p>Mock feedback session</p>		

<p>Term 2a</p>	<p>CONTROLLED ASSESSMENT</p>		<p>MOCK 3 – Students sit a full GCSE Mock Exam. (<i>students are supported with the theme and are prepared within lessons</i>)</p> <p>Mock feedback session</p>		
<p>Term 2b</p>	<p>Submission of Controlled Assessment.</p> <p>Half term</p>				

Term 3a	Yr11 have tailored revision lessons to prepare them for their exam whilst exploring gaps in learning. Boosters planned and delivered to prepare students.				
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