

Scheme of Work 2020-21

Subject: 3D DESIGN

Year Group: 10

Specification: EDUQAS ART & DESIGN (3D)

Lesson No	Topic & Objectives	Big Question – What will students learn?	Key Activities & Specialist Terminology (Do Now Task / Starter/Tasks/Plenary)	Planned Assessment	Homework or flipped learning resources DODDLE resources	Lit Num SMSC Codes
<p>ADP Codes:</p> <p>Sp2 – Students have access to outstanding learning opportunities – The department is resourced to ensure all students have access to outstanding learning experiences.</p> <p>C5 – Students reach full potential as barriers have been removed – All learning objectives and tasks – allow scope for differentiation – ensuring all learners are given a chance to learn and progress.</p> <p>Sp5 – Students take responsibility for their own learning journeys – This is encouraged and facilitated with all internal assessment tasks.</p> <p>Sp9 – Creating enjoyment and fascination in learning – Practical component of Engineering allows students to gain first-hand experience of curriculum content – creating a more enjoyable and fascinating learning experience.</p> <p>C3 – Foster a passion for learning – Specialist teachers with a passion and enthusiasm for their subjects bring first-hand experience into the classroom – fostering a passion for learning.</p> <p>M1 – All stakeholders’ model resilience, positive relationships attitudes and behaviours – all social opportunities in lessons and behaviour expectations made clear by teachers. Attitude to lifelong learning modelled by teaching staff.</p>						
1-2	LED lamp	How to use CAD (2D Design)	Learn how to use basic tool set on 2d design. Know how the different line colours impact on what the laser cutter will do (black engrave, red cut).	Accuracy of lines. Correct colour usage. Creativity of designs.	Investigate the advantages and disadvantages of using CAD.	Num – Dimensions and scales
3-4	LED lamp	Laser cutting, constructing the outer box using finger and comb joint, making a circuit.	Students use PVA to join their outer casing together, this will have been laser cut with a finger and comb joint edge. Remember to add support sticks for the acrylic and lid. Follow the support booklet to construct the colour changing LED circuit (no soldering required).	Accuracy of box construction. Function of circuit. Ability to follow the circuit instruction booklet.	Investigate the advantages and disadvantages of CAM.	Num – X, Y and Z axis
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7-8	Portfolio introduction	What is required for the portfolio assignment?	Provide folders and sketch books to each student. Explain the portfolio will run until December/January of year 11 when the external assessment will be set. Portfolio 60% of GCSE (120 marks). Share check lists and assessment objectives. Show example portfolio project – discuss. Students mind map the given theme ‘looking through’.	Checking quality and quantity of inclusions on mind map. Presentation of work in sketchbook.	Resources: Folders, sketchbooks, example portfolio project, checklists, assessment objectives grid, mind map template and example.	
9	Image board	What images will support and inspire you?	Produce an image board related to your theme/mind map. Images should be carefully selected as they will serve as inspiration.	Suitability of image selection – quality and quantity. Presentation of work in sketchbook.	Gather primary sources to meet your theme – photographs, observational drawings, etc	Lit – opportunity for extended writing.
10	Drawings	The importance of drawing	Produce drawings related to the theme of ‘looking through’. These can be things from the image board, mind map or other things related to the theme.	Skill and accuracy of drawings. Techniques used. Presentation of work in sketchbook.	Resources: Objects related to theme. Cartridge paper, pencils, pens, rubbers, sharpeners. Example work.	
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14	Inspiration from the work of other artists/designers	How do influential artist and designers use mark making techniques?	Look at the work of Willem De Kooning and produce drawings related to the theme in his style. Use charcoal and /or graphite sticks to create work with care-free lines. Annotate your work to explain what you have drawn, what you used and what you think of the work, also record your opinions on the work of the designer/artist.	Quality of the drawing produced and the detail of annotation.	Example of artist/designer's work. Cartridge paper of varying sizes, charcoal, graphite sticks, fixing spray.	Lit – opportunity for extended writing.
15	Inspiration from the work of other artists/designers	How do influential artist and designers use mark making techniques?	Look at the work of Pablo Picasso and produce drawings related to the theme in his (constant outline – animal) style. Use pencil then outline pen. Annotate your work to explain what you have drawn, what you used and what you think of the work, also record your opinions on the work of the designer/artist.	Quality of the drawing produced and the detail of annotation.	Example of artist/designer's work. Printer paper cut to various sizes, sharp pencils, outline pens.	Lit – opportunity for extended writing.
16	Inspiration from the work of other artists/designers	How do influential artist and designers use mark making techniques?	Look at the work of Andy Warhol and produce drawings/prints related to the theme in his style. Use poly-tiles and biro or pencil. Indent image onto the tile. Paint onto the tile then print onto paper. Annotate your work to explain what you have created, what you used and what you think of the work, also record your opinions on the work of the designer/artist.	Quality of the drawing/print produced and the detail of annotation.	Example of artist/designer's work. Poly tiles, bios, pencils, rollers, brushes, paints, printer paper, cartridge paper, hairdryer.	Lit – opportunity for extended writing.
17	Inspiration from the work of other artists/designers	How do influential artist and designers use mark making techniques?	Look at the work of Andy Warhol and produce drawings/prints related to the theme in his style. Use poly-tiles and biro or pencil. Indent image onto the tile. Paint onto the tile then print onto paper. Annotate your work to explain what you have created, what you used and what you think of the work, also record your opinions on the work of the designer/artist.	Quality of the drawing/print produced and the detail of annotation.	Example of artist/designer's work. Poly tiles, bios, pencils, rollers, brushes, paints, printer paper, cartridge paper, hairdryer.	Lit – opportunity for extended writing.

18	Inspiration from the work of other artists/designers	How do influential artist and designers use mark making techniques?	Look at the work of Bernard Cohen and produce mark-making related to the theme in his style. Use coloured string/thread/wool dipped in glue to create the work. Annotate your work to explain what you have created, what you used and what you think of the work, also record your opinions on the work of the designer/artist.	Quality of the mark-making produced and the detail of annotation.	Example of artist/designer's work. Cartridge paper, PVA glue (watered down), coloured thread, wool and string.	Lit – opportunity for extended writing.
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OCTOBER HALF TERM

19	Artist/Designer investigation	The work of others	Investigate the work of another designer/artist whose work can act as an inspiration source for your ideas, developments and final piece. Include images of their work, information on them and your opinions on their work.	Presentation. Evaluative comments on the work of others. Detail of information recorded about the designer/artist.	Books, computers, sketch books.	Lit – opportunity for extended writing.
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21	Practical skills	Wood joining methods to make a small-scale chair	All students learn housing, rebate & dowel joints to make the basic structure of a chair.	Accuracy of work and skill demonstrated.	MDF, tenon saws, pencils, try squares, chisels, pillar drill, dowel rod	Num – Measuring, marking out. Conversions mm to cm
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23	Applying inspiration	Design the chair aesthetics using inspiration from one of the artists/designers you have been looking at.	Add designs and remove waste to alter the aesthetics of the chair components before assembly.	Accuracy of work and skill demonstrated. Creativity and use of the work of others.	MDF, tenon saws, pencils, try squares, chisels, pillar drill, dowel rod, scroll saw, glass paper, paint	

24	Practical skills	Assembling components.	Attach the seat to the back using a housing joint, the front then attaches to the seat using a rebate joint, a dowel joint goes between the front and the back. Paint to finish.	Accuracy of work and skill demonstrated. Creativity and use of the work of others.	MDF, tenon saws, pencils, try squares, chisels, pillar drill, dowel rod, scroll saw, glass paper, paint.	
25	Chair	Presenting your work	Photograph your chair and present this in your sketch book with an overview of what you made, how you did it and what your opinions are on the work.	Presentation and annotations	Sketch book, camera, trimmer, glue, pens and pencils	
26	Festive design	Design a festive decoration to be laser cut – these need to be hand drawn in your sketchbooks	Create 4 different hand drawn design ideas for a festive decoration.	Creativity, presentation, annotations.	Inspiring images, paper, sketchbooks, pencils.	
27	CAD/CAM	Use CAD to draw your chosen idea.	Draw out chosen design on 2D Design. Red lines cut, black lines engrave.	Accuracy of CAD drawing.	Computers, design work, USB stick.	
28	CAD/CAM	Use CAM to manufacture your idea.	Once the drawing is complete it needs to be saved onto a USB stick and connected to the laser cutter form manufacturing.	Finished product	Laser cutter, usb stick, computer, acrylic pieces.	
29	Generating ideas	What ideas can you come up with for your project?	Begin to design and develop ideas for your project. Use the work of others to inspire your work.	Standard of design ideas.	Sketch books, paper, pencils	
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31	Re-purposing	Changing the record – vinyl record to speaker/amp	Discussion around sustainability and why it is important to consider when designing. Look at the work of Paul Cocksedge – change the record. Use a vinyl record in the pre-made mould, heat in the oven and stretch to create a speaker/amp. One per student. Students	Contribution to discussions. Success of outcome.	Mould, vinyl records, heat proof gloves, oven	

			may need to do this with the technician whilst others carry on with their portfolio work.			
32	Re-purposing	Changing the record – vinyl record to speaker/amp	Discussion around sustainability and why it is important to consider when designing. Look at the work of Paul Cocksedge – change the record. Use a vinyl record in the pre-made mould, heat in the oven and stretch to create a speaker/amp. One per student. Students may need to do this with the technician whilst others carry on with their portfolio work.	Contribution to discussions. Success of outcome.	Mould, vinyl records, heat proof gloves, oven	
30	Speaker	Presenting your work	Photograph your speaker and present this in your sketch book with an overview of what you made, how you did it and what your opinions are on the work.	Presentation of work and annotations	Sketchbook, camera, printer, trimmer, glue, pens and pencils	
31	Generating ideas	What ideas can you come up with for a fimo sculpture inspired by Jon Burgerman's work?	Begin to design and develop ideas for your project. Use the work of Jon Burgerman to inspire your work.	Standard of design ideas.	Sketch books, paper, pencils	
32	Fimo model	Can you create your chosen idea in fimo?	Make a small sculpture of your best idea using fimo. Once complete it will need to bake in the oven to solidify.	Accuracy and skill.	Fimo, sculpting tools, oven.	

Christmas Holiday