

## 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><b>ADP Codes:</b></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	<b>LED lamp</b>	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
5-6	<b>LED lamp</b>	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

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	<b>Image board</b>	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.
<b>EASTER HOLIDAY</b>						
62-66	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	
67-73	Final piece	Produce your final piece	Link all of your portfolio work together and create a final piece.	Quality of outcome. Skill and accuracy. Links to prior portfolio work/investigation	Sketch book. Workshop facilities.	
<b>HALF TERM</b>						
74-84	Final piece	Produce your final piece	Link all of your portfolio work together and create a final piece.	Quality of outcome. Skill and accuracy. Links to prior portfolio work/investigation	Sketch book. Workshop facilities.	
85-87	Final piece	Produce your final piece	Link all of your portfolio work together and create a final piece.	Quality of outcome. Skill and accuracy. Links to prior portfolio work/investigation	Sketch book. Workshop facilities.	