

Subject Curriculum Overview for Academic Year 2022/2023

Subject: 3D Design (OCR GCSE)		Subject Leader: Mrs Fox	Year Group: 11	AUTUMN TERM
Topic	Key Learning Points		Key Vocabulary	Assessments
GCSE Coursework NEA Portfolio 60%	<p>Continuing from the Year 11 summer term:</p> <p>The NEA Portfolio consolidates all learning to date. Students independently explore, research, design and manufacture a product of their choosing. The portfolio showcases both practical work and their personnel response to a set starting point, brief, scenario or stimulus. The project continues into year 11 and is worth 60% of the overall GCSE in 3D Design.</p> <p>Key Skills:</p> <p>The portfolio is broken down into 4 assessment objectives;</p> <ul style="list-style-type: none"> • AO1 – Develop ideas through investigations, demonstrating critical understanding of sources. • AO2 – Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes. • AO3 – Record ideas, observations and insights relevant to intentions as work progresses. • AO4 – Present a personnel and meaningful response that realises intentions and demonstrates understanding of visual language. <p>Having already completed most of the design process and some prototyping in Year 11, students will spend this first term completing all final manufacturing, testing and evaluating, and submit this 60% NEA coursework portfolio for teacher marking, and to be externally moderated.</p>		<p>Using vocabulary mastered from previous years, students embed subject specific terminology into their coursework portfolio, to demonstrate their knowledge and understanding of this subject specialism.</p>	<p>Teacher assessed coursework portfolio progression using a combination of verbal and written feedback, with key areas to develop.</p> <p>This NEA portfolio is teacher marked by January of year 11, and then externally moderated.</p>

Subject Curriculum Overview for Academic Year 2022/2023

Subject: 3D Design (OCR GCSE)	Subject Leader: Mrs Fox	Year Group: 11	SPRING & SUMMER TERM
<p><u>GCSE Coursework</u> <u>Externally Set Task 40%</u></p>	<p>Students begin designing for their 'assessment of extended response' worth 40% of their overall GCSE grade.</p> <p>The exam board offers the following key information;</p> <ul style="list-style-type: none"> • Learners must demonstrate their ability to draw together different areas of skills, knowledge and understanding from across their 3D Design course. • The externally set task allows learners to produce an extended response within the context of the creative process. The extended response must be of sufficient length to allow the learner to demonstrate their ability to construct and develop a sustained line of reasoning which is coherent, relevant, substantiated and logically structured. • This practical response may take the form of a range of visual, tactile and sensory approaches. <p>The externally set task uses the same assessment objectives (AO's) as the NEA Portfolio above, but with fewer marks available, as the expectation is to produce a 'mini' independent portfolio, with the emphasis being on the manufacturing process and outcome, rather than a heavy focus on exploration, research, and designing.</p> <p>The exam board supply the students start point, and the students progress from this context with some guidance from teaching staff.</p>	<p>Using vocabulary mastered from previous years, students embed subject specific terminology into their coursework portfolio, to demonstrate their knowledge and understanding of this subject specialism.</p>	<p>Teacher monitoring of portfolio progression offering direction and support.</p> <p>The externally set task is internally assessed.</p>

Subject Curriculum Overview for Academic Year 2022/2023

How parents can support learning in the subject this academic year

Students will be expected to continue with folder work at home. Students should be encouraged to be working on their 3D Design work for approximately 1 hour per week. During the manufacturing stages, students will need to download photographs of their previous lesson, and add these to their work as part of their making diary. It always saves time in lessons (and possible internet issues) if these photographs were downloaded at home.

Students should be encouraged to practise manufacturing skills around the home to help build confidence and accuracy using tools.

Recommended Reading

Websites:

<http://www.mr-dt.com/> <https://www.bbc.co.uk/bitesize> <https://technologystudent.com> <https://design-technology.org> <https://designmuseum.org>

Books:

SketchUp for Dummies – Bill Fane

IRONCAD Assembly Drawings – Sachidanand Jha

Universal Principles of Design - William Lidwell, Kristina Holden, Jill Butler

Points to note

Whilst we do our utmost to stock materials for GCSE students to manufacture their bespoke products, any help in sourcing these for your child would be greatly appreciated.

All GCSE work remains on school site for the following academic year after manufacture. This may be collected once notifying and being agreed by Mrs Fox or Mr Haden.

We are, as a department, doing our utmost to source responsibly for our environment; Any parents/carers within the manufacturing or design industry who would like to donate off-cuts, or materials to re-use, please contact Mrs Fox, Head of Department (donna.fox@jmhs.hereford.sch.uk), with thanks.