

POST 16 SUBJECT OVERVIEW

Name of Subject - A Level Product Design

Which Examination Specification is Studied for this Course? OCR H404—H406

Why should I study this course? - You will develop a critical mind through enquiry and problem solving, exploration, creation and evaluation. You will identify market needs and opportunities for new products, initiate and develop creativity and problem solving through modelling and making. The course allows you to develop your understanding of products, their uses and how they impact on the world we live in.

Who is suitable to study this course? - You must be open to new ideas, concepts and willing to push the boundaries of conventional design. The course does involve critical thinking and is heavily linked to STEM with a focus on Mathematics.

What GCSE Qualifications Support the Study of this Course? - The following would be advantageous: a grade 5 in Maths at GCSE, a BTEC pass (level 2) in any Design and Technology subject and a grade 5 at GCSE Design and Technology.

What are the Qualification Requirements for this Course? - 5 passes. GCSE grades 9-4 or BTEC Level 2 passes.

How is the Course Delivered? - Year 12 learners will undertake a skills based project where they will develop the confidence to use a wide range of hand tools, machines and CAD to create prototypes suitable for their chosen user. Learners will also have the opportunity to develop their creativity using a range of different presentation techniques. All learners will widen their knowledge of the design and make process.

Year 13 learners will prepare for the two externally assessed exams focussing on existing products, social and moral implications of design, manufacturing, materials and finishes. Learners will have the opportunity to identify a problem from a content of their own choice and create a portfolio of evidence to support the design and make a non-externally assessed coursework unit.

| Subject Overview | | |
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| Half Term | Year 12 | Year 13 |
| Autumn 1 | Introduction to the Workshop. Teacher led practical tasks. Health and Safety. Introduction to the Mini NEA lamp project. Problem solving. Theory lessons taught weekly. | Investigating, researching and analysing existing products. (NEA storage project) Theory lessons taught weekly. Exam prep |
| Autumn 2 | Developing practical skills working independently. Investigating, researching and analysing existing products. (Mini NEA lamp project) Theory lessons taught weekly. | Designing and modelling. Iterative process of design, model, evaluate. (NEA storage project) Theory lessons taught weekly. Exam prep |
| Spring 1 | Developing practical skills working independently. Designing and modelling.(Mini NEA lamp project) Theory lessons taught weekly. | Developing and refining ideas through evaluating resulting in a final design and prototype. (NEA storage project) Theory lessons taught weekly. Exam prep |
| Spring 2 | Developing and evaluating (Mini NEA lamp project) Theory lessons taught weekly. Exam prep | Development of the prototype. Making and evaluating against the user's wants and needs. Completion of the project. (NEA storage project) Theory lessons taught weekly. Exam prep |

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| Summer 1 | Begin Y13 NEA. Problem solving and investigating contexts. Theory lessons taught weekly. Exam prep. | Theory lessons taught weekly. Exam prep |
| Summer 2 | Focus on Y13 NEA. Context investigation Theory lessons taught weekly. Exam prep. | |

How is the Course Assessed?

Year 12: This year will focus on practical skills, refining design work and creativity. The learners will be assessed through a Non Externally Assessed coursework unit where they will go through the iterative process to identify a problem, design, model, evaluate and make a suitable prototype. Students will be developing their subject knowledge through theory lessons and will be tested every 6 weeks internally through praising stars tests in lesson. The year 12 exams will be internally assessed at the end of the academic year.

Year 13: This year the learners will have two externally assessed exams. Paper 1: The Principles of Product Design (80 marks available, 1 hour and 30 min paper) 26.7% of the overall A Level qualification and Paper 2: Problem Solving in Product Design. (70 marks available 1 hour and 45 minute exam) 23.3% of the A Level qualification. The remaining weighting of the qualification 50% will be internally assessed. The learners will undertake a substantial design, make and evaluate task which will span over a 65 hour period. All learners will be internally assessed every 6 weeks through the praising stars assessment plan..

What is our Recommended Subject Reading list to Support your Study? -

OCR Design and Technology for AS/A Level (OCR AS/A Level Design and Technology 2017) Paperback ISBN 1510402659 Hodder Education
Essential Maths Skills for AS/A Level Design and Technology Paperback ISBN 1510417060

OCR AS/A Level Design and Technology Product Design - My Revision notes - Arnold, Morrison, Sumpner ISBN 978-1-5104-5896-3 Hodder Education

50 Designers You Should Know ISBN-10 3791347209

Design: The Definitive Visual History Hardcover ISBN-10 0241185653

