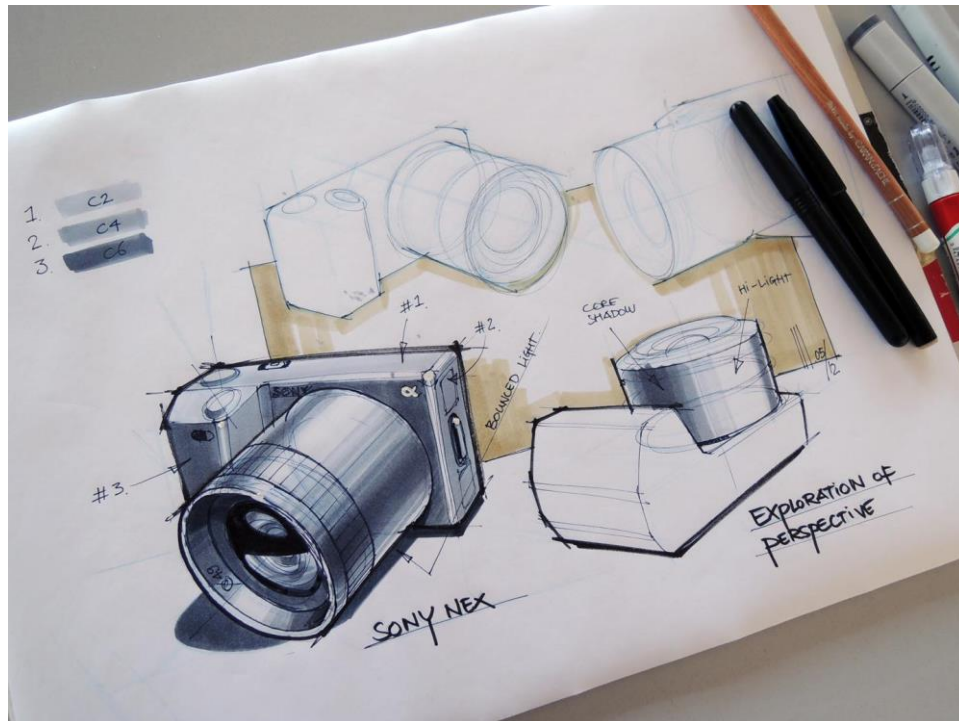




YSGOL GYMUNEDOL
PORTH
COMMUNITY SCHOOL

STEM FACULTY



PRODUCT DESIGN

YEAR 11 CURRICULUM MAP



OVERVIEW

In Year 9 students will begin a 3-year GCSE Product Design course and will sit an external exam in the summer of Year 11, along with a Non Examined Assessment (NEA). Both exam and NEA are each worth 50% of the final grade. In years 9 and 10 pupils develop the necessary skills intended for the more demanding nature of the GCSE course in Year 11.

GCSE 3-YEAR PLAN:

YEAR 9: SKILLS BUILDING

YEAR 10: SKILLS BUILDING & Mock NEA

YEAR 11: NEA (50%) and Exam (50%)

STRUCTURE	
LESSONS	5 lessons a fortnight [60 minutes each].
CLASS WORK	NEA task completed on paper and using ICT NEA Task (make) using all creative design equipment/ICT Pupils work on A3 sheets
DELIVERY	Each category of the NEA will be discussed before starting each sector. Initial categories are RESEARCH, INITIAL DESIGN IDEAS, DEVELOPMENT, FINISHED DESIGN and EVALUATION.
ASSESSMENT & FEEDBACK	Formal Assessment cannot be given for the NEA task, informal projected recording on SIMS. Theory work for exam begins Feb. Mock exam given
SKILLS	Using skills required in year 10, pupils will make their models and final finished product.
HOMEWORK	Homework will centre research initially, and then topics featured in the exam, e.g materials, design procedure, manufacture etc.
RESOURCES	All departmental resources given also after school time for pupils
RESULTS	Results and data will be discussed / moderated at department meetings and logged on SIMS spreadsheets.
SPECIALISTS	Mr. P Daniels, Mr Owen Jones and A N Other



YEAR PLAN

TOPIC	TIME (approx.)	LESSON CONTENT	SUMMATIVE ASSESSMENT
<u>INTRO TO GCSE</u>	2 WEEK	<ul style="list-style-type: none"> Decide on topic/brief Basic idea How to carry out research NEA started Mind mapping 	<p>TASK: initial work assessed for content and effort</p> <p>Depending on work attitude contact home may be initialised.</p>
<u>RESEARCH</u>	3-6 WEEK	<ul style="list-style-type: none"> Look at how research is carried out How research is represented in the NEA Target market for product idea Competitor product analysis Research data presentation – graph etc 	<p>TASK:</p> <ul style="list-style-type: none"> Mind mapping Problem/brief research Questionnaire Customer profile What is a competitor product? Appropriate analysis Assessment carried out for internal use only
<u>SPECIFICATION AND FINAL BRIEF</u>	7-12 WEEK	<ul style="list-style-type: none"> Importance of topics Function Size Materials Environment Aesthetics Safety Fixings Finishes Final product testing procedure 	<ul style="list-style-type: none"> Assessment carried out with an informal projected mark. SIMS
<u>IDEAS AND DEVELOPMENT</u>	13-18 WEEKS	<ul style="list-style-type: none"> Pupils start with a basic design and using an iterative design procedure develop their design through a series of stages to arrive at a final finished product proposal 	<p>Assessment carried out with an informal projected mark. SIMS</p>



YEAR PLAN

TOPIC	TIME (approx.)	LESSON CONTENT	SUMMATIVE ASSESSMENT
<u>FINAL DESIGN</u>	19-21	<ul style="list-style-type: none"> Formal drawing of design Prototype drawing of design Formal sizes and materials 	Informal assessment for internal use SIMS
<u>MANUFACTURE OF FINAL DESIGN</u>	21-26 WEEKS	<ul style="list-style-type: none"> Workshop safety Materials and tooling needed Specialist equipment/skills? Pupils make the final design to their specification Construction finishes 	Informal assessment – projected mark Departmental and SIMS
<u>FINAL EVALUATION OF DESIGN IMPROVEMENT</u>	26-28 WEEKS	<ul style="list-style-type: none"> Evaluation against specification Continuous writing Draft Improvement looking at manufacture, aesthetics, function and material choices 	<ul style="list-style-type: none"> Assessment carried out with an informal projected mark. SIMS Final mark for NEA folder, with cross departmental moderation Marks submitted
<u>THEORY WORK</u>	29+ WEEKS	<ul style="list-style-type: none"> pupils start theory lessons theory covers: materials, design procedure, manufacturing systems designers: Airbus, James Dyson, Bethan Gray environmental issues new technologies CAD CAM Legislation Energy processes 	Mock exam and mini (10) tests on each separate topic. Assessment carried out with an informal projected mark. SIMS