DESIGN TECHNOLOGY

St John's Middle School Academy

YEAR 11

FINAL GCSE EXAM

Core content and specialist knowledge: Revise and practice exam papers in preparation for your final exam in DT.

EXAM REVISION

AO3: Evaluate & Test: Gain feedback throughout your project, and test your final product – have you met your brief?

AO2: Realise Design ideas: Manufacture your product using skills and processes used throughout your DT journey.

AO2: Generate & Develop Design Ideas: Develop your sketches and communicate ideas. Developing them using modelling techniques

NEA COURSEWORK

AO1: Specification & Brief: Clarify the needs and wants of the project writing your own brief & specification

AO1:Research & investigation Follow on from your summer task to further understand the context. Client interviews, product, site analysis and designer research.

YEAR 10

Design Movements

Booklet – Introduction to the project- Design Brief

Design: Reference key design movements top to develop a stylish functional product.

Initial Concept Sketches: What ideas do you have already? Can you visualize them?

Materials / Make: Use materials you have not combined before such as acrylic and timber to develop a unique stylized product.

Design: CAD What is computer aided design? Learn to use the basics of 2D software to design products

Make: What is CAM? Use the laser cutter to produce your final product!

YEAR 9

High school

USB Light

Evaluate: Does your product work? Does it reflect Alessi Style?

Production Methods What are the 3 manufacturing methods?

Make: Use a wide range of skills, materials and processes to develop your unique product.

Design Develop your design through iterative processes and modelling, testing & evaluating before making a final product.

Materials: Polymers Classification. What is a polymer?

Design: Focus your idea on the work of famous designers, use product design as inspiration.

Product Analysis: ACCESSFM – Asking Questions and forming answers about products

Specification What is a design Specification?

Booklet – Introduction to the project- Design Brief

YEAR 8

Research

Alessi Clock Project

Make: Measure and mark out specific sizes using what tools and equipment?

Evaluate: At each stage of making, how can you improve your product? Would you change any thing?

Materials: Working with wood, cutting and finishing techniques.

Make: Can you make an accurate product using machines and tools independently?

Testing / Modelling: Will my product work? What can I do to improve it?

Evaluate: What skills have you developed? Test your product and consider how you would improve it.

Deepen your understanding of DT in the world around us whilst developing products that help various needs and users.

YEAR 7

KS3

Shipshape Desk tidy

Materials: Wood classification. Where does timber come from?

Final Design: Developing Rendering skills

Annotation: Using ACCESSFM

Design: Designing for a user and client. What is an isometric projection? Develop design ideas using isometric skills

Booklet – Introduction to the project- Design Brief

Work in more depth on projects, honing your practical skills, improving your resilience & problem solving whilst developing independence in the workshop.

YEAR 6

Design & Make

Gears What do Gears do? How do you work out Gear Ratio?

Cams What do cams do? How do they work?

Design: Basic Isometric drawing

Make: Using hand tools

Materials: Working with wood, cutting and finishing techniques.

Evaluate: Does your product work? How can you fix problems?

Motion What are the 4 types of motion?

YEAR 5

Motion

Systems & Control Mechanisms

REFECTION What have you learnt so far?

Linkages mechanical control systems **Reverse Motion, Bell Crank, Parallel Motion, Crank and Slider**

Levers Classes of lever What is fulcrum, effort and load

Introduction to the workshop: Health and Safety

Booklet – Introduction to the project- Design Brief

KS2

Experience a wide range of fun and exciting projects that teach you valuable skills in the workshop, understanding different materials and how they work.

'Forgiveness, Love, Integrity & Perseverance'