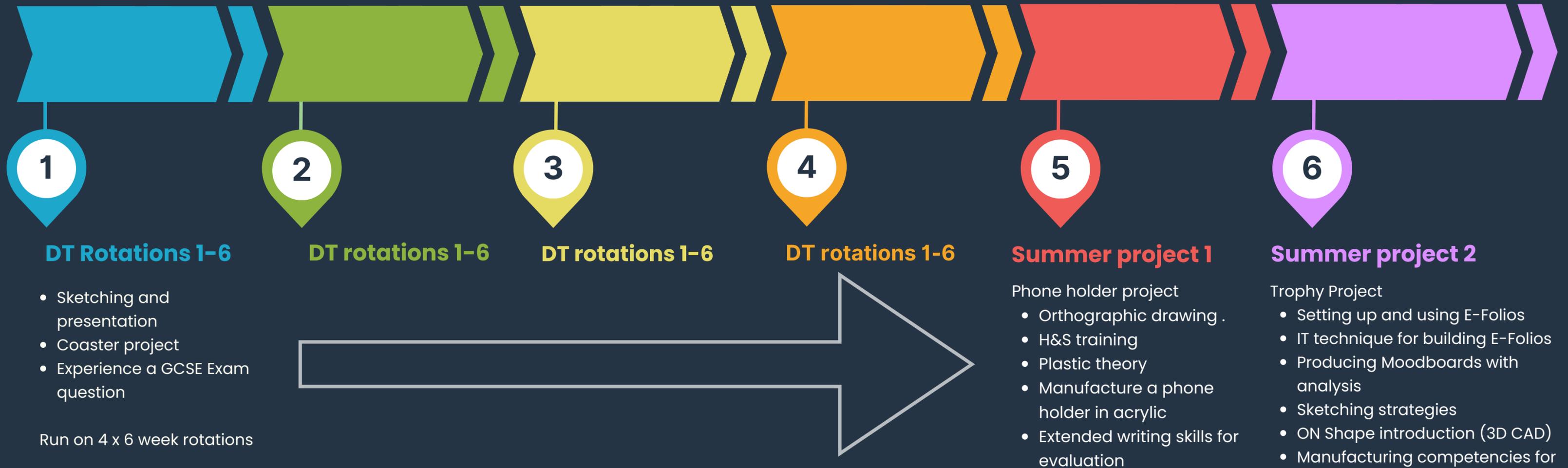


Faculty: Design and Technology
Subject Area: DT

YR9 – DESIGN & TECHNOLOGY



GCSE – DESIGN AND TECHNOLOGY (YR 10)



1

Frame Project

- Understanding an orthographic drawing
- Making a predominately wood based product from a specified drawing
- Theory topics
- Woods - from origins
- Scales of manufacture
- The 6 Rs
- Development of isometric sketching through wood joint research. E-Folio development

2

Cracker Project

- Understanding packaging and its role in manufacturing
- Development of a Net to form a christmas cracker
- Theory topics this term
- Paper and board
- SMART materials
- Polymers
- Labels and logos

3

Lighting

- Design movements study
- Sketching revisited and developed.
- Simple electronics manufacturing
- Theory topics to be covered
- New materials
- Smart materials
- Polymers
- Metals
- On shape development and 2D Design development
- Evaluating and presenting final products

4

Lighting cont.

5

Drawing enhanced

- 1 point perspective
- 2 point perspective
- Orthographic - isometric and isometric - orthographic
- Wood lathe demo
- Mortiser demo

6

NEA

- Exam revision
- NEA controlled assessment
- Section A - Investigation
- Section B - Brief and Specification
- Section C - Design ideas

GCSE – DESIGN AND TECHNOLOGY (YR 11)



NEA and revision

- Exam revision
- NEA controlled assessment
- Section A – Review and improvement
- Section B – Review and improvement
- Section C – Review and improvement
- Section D – Development of ideas



NEA and revision

- Exam revision
- Section D – Development of ideas



NEA and revision

- Exam revision
- Section E – Making



NEA and revision

- Section E – Making
- Section F – Evaluation
- Exam Revision



Revision

- Exam Revision



Examination

- 2 hour exam worth 50% of the final grade

A LEVEL – PRODUCT DESIGN

Chair project

- Artist study
- Ergonomics and Anthropometrics
- Isometric development
- Concept sketching
- Rapid prototyping
- Manufacturing development
- H&S knowledge
- CAD/CAM
- Board production
- IT skill development
- Presentation balance
- Photographic skills

Homeware project

- Ergonomics
- Creative designing
- Innovation
- Materials experimentation
- Folder development
- Presentation development
- CAD/CAM
- Making skills developed
- H&S Knowledge

NEA

- Section A – investigating and concept sketching
- Section B – Brief and specification

NEA

- Section C – Developing
- Section D – Manufacturing

NEA

- Section E – Evaluating



Theory paper 1

- Materials and their application
- Performance characteristics of materials
- Processes and techniques

Theory paper 1

- Digital technologies
- Factors influencing the development of products
- Design theory
- Designing for maintenance and the circular economy

Theory paper 1

- Health and safety
- Protecting designs and intellectual property
- Enterprise and marketing in the development of products

Revision

- Focus on Paper 1 recap and revision

Revision

- Focus on Paper 1 recap and revision

Examination

- Paper 1 – 2.5 hours
- Marks out of 120
- Focus on materials and processes
- Paper 2 – 1.5 hours
- Marks out of 80
- Focus on principles of design

Theory paper 2

- Designing and making principles
- Design methods and processes
- Design influences
- Technology and cultural changes impacting on Design

Theory paper 2

- Product life cycle
- Responsible design
- Design for manufacture, maintenance, repair, and disposal
- National and international standards in product design

Theory paper 2

- Design communication
- Selecting appropriate materials and components
- Tolerances
- Specialist tools and equipment
- Accuracy in design and manufacture

Revision

- Focus on Paper 2 recap and revision

Revision

- Focus on Paper 2 recap and revision