Woodbrook Vale School
Design & Technology Curriculum

Skills learnt

Knowledge & understanding

Practical Outcomes: *Assessments*

Year 7

Oblique Drawing

Understand basic measurements, scaling and how to render shapes to show the appearance of light

Outcome: *Maze Game Design*

Researching others work

Using existing designs to get a better understanding of project

Outcome: *Mood Board*

Designing & exploring ideas

Use research to generate a range of different ideas

Outcome: *Generate new ideas*

Making safely & accurately

How to **safely** use a range of tools and equipment in the workshop

Outcome: *Maze Game Final Product*

CAD Techsoft 2D Design

How to use CAD software to create various projects

Outcome: *Bookmarks*

In ADT students are given the opportunity to experience Fine Art, Design Technology, and Food and Nutrition. A predominantly practical curriculum, students learn skills which build throughout key stage 3 and prepare them for possible option choices at key stage 4.

We expect students to be independent learners and foster individuality, creativity and resilience across a broad range of projects. The course has been sequenced to enable students to grow and develop their understanding of the formal elements in each subject area, as well as the work of artists, chefs and designers, building knowledge, which informs their choice in practical activities.

Year 8

Shading techniques & Isometric drawing

Recap on how light appears on shapes. Produce drawings by hand on computers.

Outcome: *House Drawing*

CAD 2D Design

Work shown in booklets, teacher led activities and peer assessed work.

Outcome: *2D Design (set task)*

Research & design a product

Analysing the brief. Use the work of others to influence ideas. Investigate motions for CAM toys. Designing for a client.

Outcome: *Key Ring for client*

Nets: 3D shapes

Use research to develop net designs. Use research to generate a final solution in ORTHOGRAPHIC.

Outcome: *Net Design*

Making safely & accurately

Build on workshop knowledge, use chisels to create housing joints.

Outcome: *CAM Toys*

CAD 2D Design

Building knowledge of 2D design.

Outcome: *Product for client*

Independent study

Investigate history of design e.g. famous designers. Product analysis.

Outcome: *Determine Year 8 grade*

Year 9

Rendering objects & two point perspective

Using rendering techniques and two point perspective to draw designs.

Outcome: *Wooden box design & Street Scene*

Research & design a product

Research the needs of a client and what they would like in a box. Develop designs according to client needs.

Outcome: *Wooden box for client*

Design Development

Use research and practical skills to make informed design decisions. Identify pros and cons of prototypes.

Outcome: *Prototype wooden box*

Practical Skills

Use knowledge learnt to demonstrate creativity and independence.

Outcome: *Teachers assessed practical*

CAD Software

Learn basic features of both Inventor and Google SketchUp.

Outcome: *Dream house drawing*

Independent study

Investigate renewable energies, iconic design, famous designers and products, ergonomics and anthropomentrics.

Outcome: *Determine Year 9 grade*