6th Form Induction

Design and Technology: Product Design - CGS

Induction Session 1

Introduction to Specification Outcomes from previous years Expectations of the course

Induction Session 2

Tour of Facilities Materials and Processes available Commercial Considerations for design and manufacture

Preparation for Induction Assessment

When you arrive into the SJSF you will take an examination. To prepare for this assessment you will need to engage in the activities below.

- 1. Research different materials to gain an understanding of the properties of materials that are located in Topic 1 of the Specification (page 9) the link is below, you will need to download the specification. Your knowledge needs to move beyond generic 'woods, metals and polymers' and into specific materials.
- 2. Part of your assessment will involve sketching and designing. You should practice sketching using 2D and 3D sketching methods. Take a domestic product and sketch these from observation (toaster, kettle, iron, etc). Once this is completed render to achieve a 3D effect.
- 3. Research the processes wood lamination (bending of wood) and aluminium sand casting. You will be required to demonstrate an in-depth knowledge of specialist tools and equipment in order to carry out these processes. Ensure you understand the advantages and disadvantages of each method.
- 4. Research the design movement Bauhaus Modernist.
- 5. Research the harmful effects of deforestation.
- 6. Research the advantages of genetically modified timbers.

Induction work for an effective start -

The following work needs to be completed to allow an efficient start to the course.

Review Specification

 $\underline{https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/design-technology-product-design-2017.html}$

- Research of iterative designing, what is it?
- View the following video on creating innovative briefs

https://www.youtube.com/watch?v=CnKeVs-_9zs

- Initial investigation into a problem, are there any problems that you can design to?
- View Youtube video 'sketch a day'. Product Design sketching, observing style and communication techniques.

https://www.youtube.com/user/sketchadaydotcom

• Product Analysis Activity – Using the images below analyse the products against the following headings: Form, Function, User Requirement, Performance Requirements, Materials and Processes.

Product Analysis ActivityContemporary Ornament



Contemporary Portable Lighting



Contemporary Bird Feeder

