A-Level Design & Technology (Product Design)

Dear potential Design & Technology students,

You are receiving this document as you have expressed an interest in studying A-Level Design & Technology at Gillingham Sixth Form. This will inform you about the course and teacher expectations, in order to prepare yourselves for starting in September.

Key Information:

The course is a two year linear course, consisting of two components:

Component 1:

Design & Technology in the 20th Century

Written Exam: 3 hours (50% of qualification)

Exam Board: EDUQAS

A-Level Design & Technology

Component 2:
Design and Make Project
(Coursework)
80 hours

(50% of qualification)

It is very similar to the current format of the Design & Technology course you are currently studying, however there is no specific focus area. It must be noted that there is less practical work than GCSE, and approximately 15% of the course is Mathematics based. Please do not choose this subject if you think the workload is minimal and simply want to 'make things'. Due to the nature of coursework, there are lots of deadlines to meet. Apologies if this sounds a little negative, but we don't want students thinking this course is purely practical work! Due to the demands of the syllabus we are looking for students to achieve around a GCSE grade 5 in Design & Technology and a GCSE grade 5 in Mathematics in order to study this subject at A-Level.

Get ahead...

So, why not get ahead and start looking at the key theory topics that will run throughout the course and eventually be tested in the final exam:

- Designing and innovation
- Materials and components
- Processes (by hand)
- Industrial and commercial processes
- Product analysis and systems
- Human responsibility within design
- Public interaction.

These are very similar to the topics covered at GCSE, but are covered in more depth. To get a greater understanding of these topics, refer to your revision notes and revision guide from Year 11. See what you can remember about each of the key topics and get your interest for the subject flowing!

Other ways of preparing yourselves for the course include looking at the following:

Websites

Wired UK: https://www.wired.co.uk/

A contemporary e-magazine that looks at the technology of today.

The Design Museum: https://designmuseum.org/
A fantastic resource of designers and inspiration.

Grand Designs: https://www.granddesignsmagazine.com/

An insight into some fantastic architecture of today.

IKEA: https://www.ikea.com/gb/en/
A great source of product design inspiration!



You Tube Videos

Iterative Design in Action: https://www.youtube.com/watch?v=Rnsk5IA52ps

This is a brief introduction to the iterative design process that will be prominent throughout the course.

Sir James Dyson: Philosophy of Design: https://www.youtube.com/watch?v=XBZk3G0c1kU
James Dyson talks about how technology drives the products that are made at Dyson. You will need to be aware of the work of others.

Art/Architecture- Dieter Rams: https://www.youtube.com/watch?v=nXwpn90Gdec
A video exploring the iconic designer Dieter Rams and his philosophy in making beautiful, long-lasting products.

TV Shows

The Repair Shop: BBC One, BBC iPlayer

View the skilled practical processes involved in repairing a series of products.

Money for Nothing: BBC One, BBC iPlayer

Looking at the sustainability of products, by redesigning and reusing them. There are some interesting practical tips on offer.

The Apprentice: BBC iPlayer

Quite often 'Design challenges' are the main focus of the TV show. See if you can design a product

that is better than the candidates!

Grand Designs: Channel 4, All4

An insight into some fantastic architecture of today – thinking outside the box.



TED Talks

The first secret of design is...noticing: Tony Fadell

Happiness by Design: Stefan Sagmeister

Design and Destiny: Phillipe Starck

Organic Design Inspired by Nature: Ross Lovegrove

Feel free to explore the TED talks website (https://www.ted.com/talks) and find your own videos relating to Design & Technology. If you find any interesting videos, let me know!

Practise your sketching!

Get yourself an **A5** sketchbook and practise your sketching. Sketching forms a huge part of the course, so become more confident at sketching products around you.



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Try this simple task:

- 1. Choose a room in your house
- 2. Sketch a 3D product from that room (add 3x key labels)
- 3. Write in one sentence how you could improve the product.
- 4. Sketch the new and improved product.

A brief summary...

There is an expectation that you arrive in September prepared for this course. Whilst we do not expect you to complete and view all of the tasks mentioned, please do dip in and out of those that sound most appealing to you. The more you engage now, the better your conceptual understanding will be moving forward in September. We would love to hear from you as you start to engage in some of these resources. If you have any questions feel free to contact:

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or

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(Head of Design & Technology)	

Best wishes and hope to see you soon.

N Hann