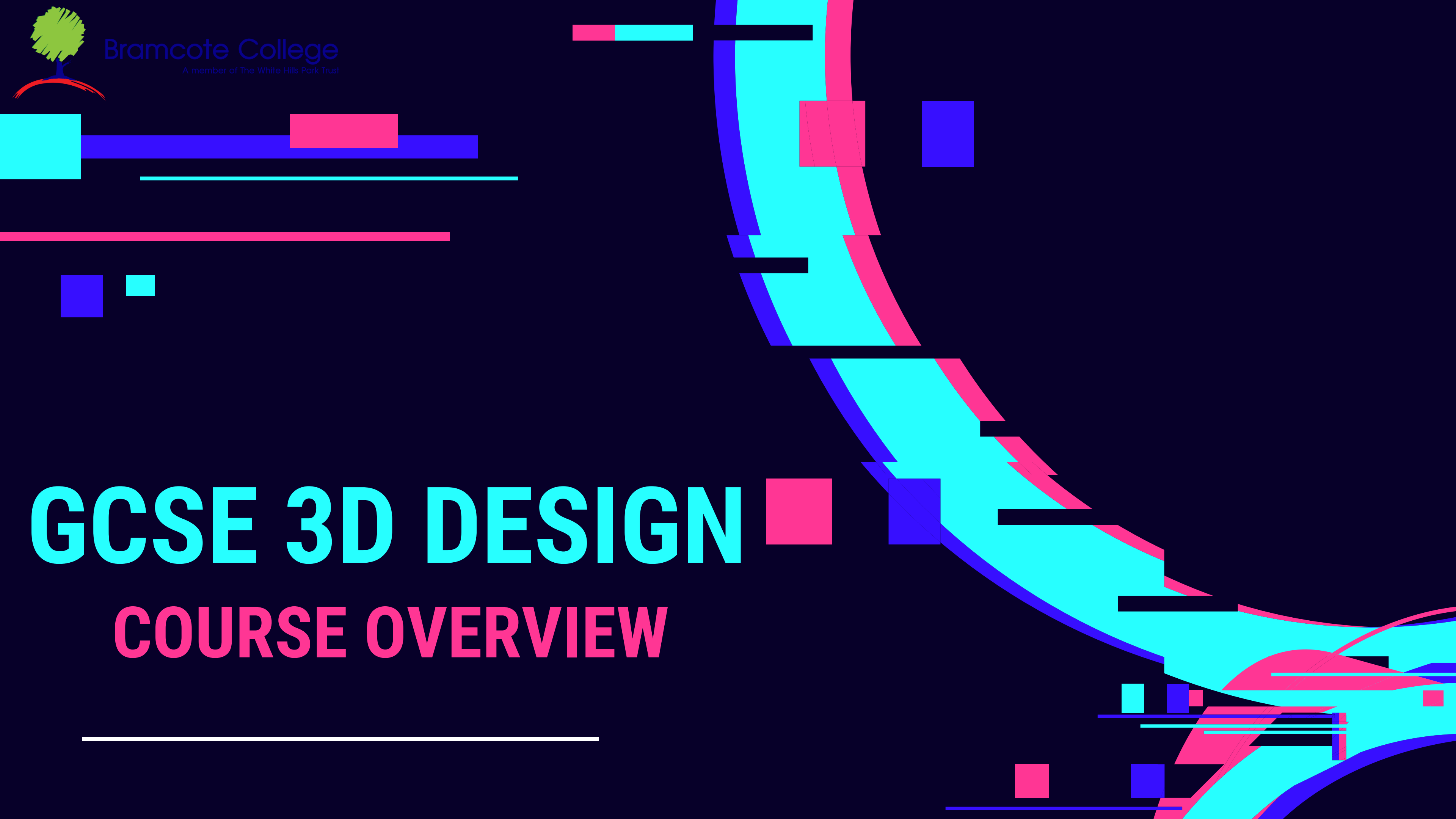


# GCSE 3D DESIGN

## COURSE OVERVIEW



# AQA 3D Design Assessment Structure

## Component 1 Portfolio

Non-exam Assessment (NEA)  
Coursework 96 marks 60% of GCSE  
Grade

## Component 2 Externally set assignment

Preparatory period followed by a 10  
hour practical exam  
96 marks 40% of GCSE Grade

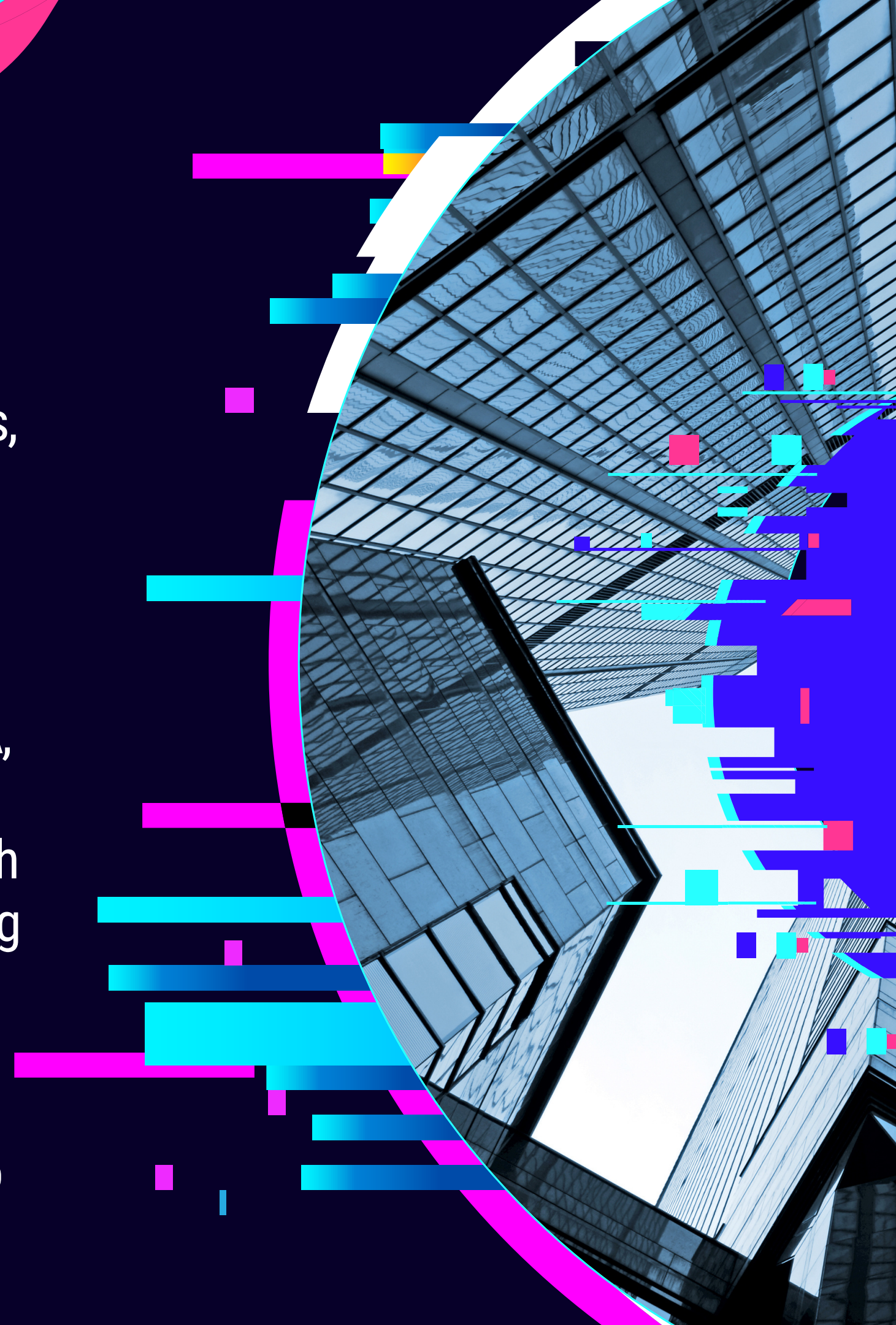
## Topics covered in this course include:

During the first term students will learn a range of different skills to prepare them for the NEA. This will range from creating bespoke boxes, pewter casting, drawing and card modelling techniques.

### Portfolio Project

Students will be designing and making a product themed around IKEA, we begin the project by visiting IKEA in Giltbrook to research suitable products that could be made in school. From here you go onto research IKEA designers and produce / develop Ideas and models before making your final product. In the past students have made objects such as lamps, desk tidies, mirrors, clocks to name a few.

Students do not need to have done 3D design as an option in year 9 to be able to study this.







# IKEA Design

**What small scale objects do I like that would be suitable to create?**

- Picture frame
- Lamp
- Object block
- Chair
- Desk
- Shelf
- Plant pot
- Storage unit

**What furniture materials are used by IKEA and Scandinavian designers?**

- Natural Timber
- Chop Board
- Stone
- Textiles
- Shel
- Glass
- Steel
- Plastic

**What designers/artists could I base my ideas around?**

- Veneri Panton
- Paul Henningsen
- Bruno Maunsson
- Bjorn Dahlstrom
- Carl Magnusson

**Initial Ideas**

Desk, lamp inspired by Paul Henningsen

Lamp

# IKEA research

The founder of IKEA was Ingvar Kamprad. He started selling goods at age 17 and later progressed to furniture and home goods. His plan was to buy cheap and sell it cheap. IKEA was founded in 1943 when Kamprad was 17. The name of the company came from his initials and the word 'Ikea' which means 'to do' in Swedish. He was inspired by the idea of selling goods at a low price.

**SARAH FRAGER:** She has been working at IKEA for 10 years. Her role is the Swedish and Danish designer. She works on the design of the products. She is inspired by the idea of creating products that are functional and beautiful.

**LINA JOUKERTIN:** She is a designer at IKEA. She works on the design of the products. She is inspired by the idea of creating products that are functional and beautiful.

**PAUL HENNINGSEN:** He was a Danish designer. He is known for his designs of lamps and furniture. He was inspired by the idea of creating products that are functional and beautiful.

**HENRIK PREUTZ:** He was a Danish designer. He is known for his designs of lamps and furniture. He was inspired by the idea of creating products that are functional and beautiful.

In this page, I've looked into the history of IKEA and also the work and backgrounds of IKEA designers. I've found that they use a maximum of 2 materials. And that the colours are very minimalist such as white, black, grey, natural and natural colours such as beige. In particular, Paul Henningsen. I like his designs a lot as they are interesting to look at. I like that his designs are also not too modern and almost antique looking as all the designs look modern.

# IKEA PRODUCTS

In this design brief, we have tried to design a small scale object that could be used in a room. It would be used to display some small objects and things that are interesting to look at.

**Complex**

I have chosen to look at various shelving units. This is because they can be varied and changed to adapt to a particular type of need, person or use. They can be made quite straightforward or very complex.

**Photo frame**

I like the wooden rim and the fact it has numbers giving it a minimalist/basic look. I would improve this by changing the shape but I love the gold rim, this would complement a black and white photo.

**Lamp**

I like the black wood. It creates more of a statement. I would improve this by adding a 'handle' or a 'knob' to the side of the lamp. I like the black wood. It creates more of a statement. I would improve this by adding a 'handle' or a 'knob' to the side of the lamp.

**Shelving unit**

I like the black wood. It creates more of a statement. I would improve this by adding a 'handle' or a 'knob' to the side of the lamp.

**Desk**

I like the black wood. It creates more of a statement. I would improve this by adding a 'handle' or a 'knob' to the side of the lamp.

# GCSE 3D DESIGN

## A01 IKEA PROJECT

### Research

Research is worth 25% of the coursework

# POUL KJAERHOLM

**POUL KJAERHOLM**

Poul Kjaerholm was a Danish designer. He was born on the 8th of January 1929 and died at 52 years of age on the 18th of April 1980.

Kjaerholm began as a cabinetmaker's apprentice with Gronbech in 1948. He later went on to attend the Danish School of Arts and Crafts in Copenhagen in 1952. One year later he met a woman and got married. Her name was Hanne Kjaerholm. She became a very successful architect. He was a very articulate man as he started a career as an educator in 1952 while he was continuing to study.

**Materials**

he typically used materials like plywood, glass, steel, leather and rarely plastic.

**Designs**

He won the Lunning award in 1958. And the Grand Prix award at the Milan Triennale in 1957 and 1960. Also, in 1967 he was given the design prize for PD.

**Personalities**

I like his modern style. I would make the colours brighter as the furniture is simple. I could use different styles of legs in my design.

# POUL KJAERHOLM

**Interpretations**

I have drawn a chair and table. I used the orange body because that's the colour of his chair. I used curved legs because that's the shape of his chair. This is successful as it gives some resemblance to the chair.

**Table**

This table is inspired by the top of a stool. I drew a circle and shaded it from light to dark to show that it's a table. This could be improved by changing the colour to make it stand out.

**Chair**

This chair is inspired by the shape of a chair. I used curved legs because that's the shape of his chair. This could be improved by changing the shape of the chair.

**Overall**

Overall, this is my favourite design, as personally it's the one which is most interesting. I also love how it's made out of glass and it's very modern.

# POUL HENNINGSEN

**INTERPRETATIONS**

**Lamp**

I have drawn a lamp. I used the orange body because that's the colour of his lamp. I used curved legs because that's the shape of his lamp. This is successful as it gives some resemblance to the lamp.

**Photo frame**

This photo frame is inspired by the shape of a photo frame. I used curved legs because that's the shape of his photo frame. This could be improved by changing the shape of the photo frame.

**Chair**

This chair is inspired by the shape of a chair. I used curved legs because that's the shape of his chair. This could be improved by changing the shape of the chair.

**Table**

This table is inspired by the top of a stool. I drew a circle and shaded it from light to dark to show that it's a table. This could be improved by changing the colour to make it stand out.

# POUL HENNINGSEN

**CASE STUDY**

**Henningesen is a Danish designer, architect and fine designer. He was inspired by his work. Paul was born on the 9th of September 1929 and died on the 30th of January 1987. He was educated at the Technical University of Denmark from 1949 to 1947. He studied architecture but never graduated, instead he chose to follow careers in inventing and painting.**

**His most famous designs consisted of the PH lamps. Such as the PH5 lamp, his snake chair, PH grand piano and so much more.**

**Personally, I like his designs as they are very modern and unique. I love that he used natural earthy tones on his designs. Giving it a very minimalist look. His designs are simple and interesting. I will use the many layers of materials like he did on his lamps.**







# Final Design

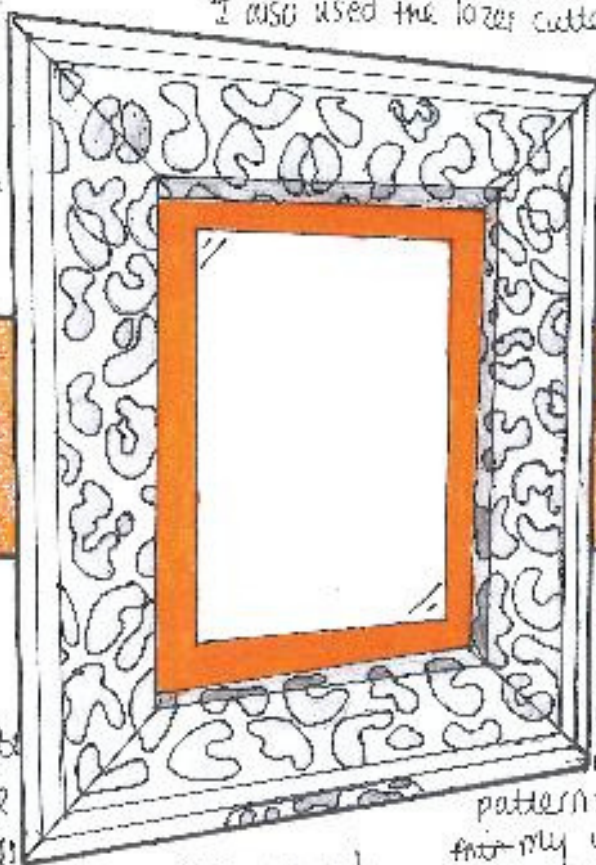
my main source of inspiration

## Materials:

The materials I used for my frame were pine, teak and clear acrylic for the stand and frame.

## Dimensions:

My frame is 30cm by 24.5cm. It has a width of 2cm.



## Techniques used:

All the joints are mitred half-lap joint. For the pattern I hand drew a leopard print pattern and it was laser cut into the frame on the inside. I used piggraphy to give some definition for the acrylic frame. I also used the laser cutter and the strip heater to bend it into shape, to make the frame stand up.

## My opinion:

Overall, I really like my design as it uses my favourite pattern and a range of different materials including pine, teak and acrylic. I would improve my design by making the pattern smaller and more intricate. I like how all the woods join together smoothly to give different shades and from a far it looks like a stripe making the frame more effective.

## Inspiration:

My leopard print came from my independent research. I used fashion and many different patterns. Poul Kayeheim was my inspiration for the different materials used to create a line effect which he used alot in his design. I used orange cord for the border as Poul Henningsen uses a variety of colours including green and orange.



## A03 IKEA PROJECT

### Final Outcome

This area is worth 25% of the coursework











## Year 10 Basic Skills

### Timber Boxes

During the first term students learn a range of traditional and contemporary skills ranging from, joinery, wood carving, pyrography, laser cutting and finishing skills. Every student creates their own bespoke design.



**DESIGN PROCESS**

If my poor craftsmanship concealed the fact that this is a mug coaster then I'm truly sorry. However the difficulty did not stop me from finding joy in creating such a chaotic but also calming piece of art. The more I stare at the imperfections within my creation, the more I find that they add a sense of personality such as the uneven sides of the circle which were unintentional but remind me of the concept that almost nothing in nature is perfect but we can still find peace in seeing it and a world that is perfect would be monotonous and without purpose. The art on top of the coaster is inspired by the artist/director Hayao Miyazaki with both aspects relating to greenery/nature; the strange creature in the coaster is a forest spirit which thrives in the presence of greenery. Seeing how nice this material could look, my mind immediately went to how I could implement this in my clock and it didn't take long for me to realise lips and plastic were a perfect match to create the illusion of glossy lipstick. The coaster gave me a chance to practice finishing and polishing which I admit was not enjoyable but did result in improvement.

What I think I did well at - most technically ambitious design I have created. Lips and lollipop work smoothly and the finish was overall smooth. I was able to create a convincing finish on the lollipop with a black marker to give the illusion of shading & shadows. Vivid colours of the lips, lollipops and rainbow contrast from the clouds.

Next Steps - the quality of painting was exceptionally poor and seems rough and noisy, especially rainbow and clouds. - the next time using paint, I would cover them with several more coats to reduce areas that are uneven. - the shape of the clouds could also be smoother as the bumps are irregular and different. - due to some confusion over the available clock hand colours, the white paint is rushed with several areas still being blue.

Relatively speaking this was one of the easier steps in the process of making this clock as I had already previously created both a drawing and a 3D cardboard model. Although it would be false to claim that this was not an essential step in the arduous journey that was making this clock. It allowed me to experiment with the size and scaling which ultimately allowed me to come to dimensions I was content with. Furthermore, I was able to rethink at certain aspects of the design that perhaps were unrealistic or unsuitable for the clock such as text, symbols and the ring behind the rainbow. Adding these would have put strain on the already limited amount of time we had, so I believe this was a necessary decision.

**1960's rainbow clock**  
This clock was influenced by the 1960's era of art and design (pop art), this is visible through the vibrant colour palette of choice. The lips were largely inspired by Marjorie Strider's unique style, this is evident with the red lips which uses a white acrylic to show light reflection and adds a sense of glossiness. It catches the viewers eyes and adds variety to the clock features. The lollipop can be described as eye candy (pun intended). The design follows Strider's artistic values with the white reflection and black banding/acrylic and the most impressive part in my opinion is the way the lollipop sticks are cleverly implemented into the design, acting as clock hands which results in both form and function.

red acrylic  
blue acrylic

## Year 10 Mock Exam

### Acrylic Clocks

Students learn a range of practical skills before the exam and then put it into practice by creating their own designs independently

