

# UOB. 3D D&C. L6. RESEARCH PLANNER

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Version: 6



Intro

Introduce the outline topic, nature and basis of your research project(s) and / or the context or problem? Can you give it a title?

For this project I will be constructing a lighting system that will bring another element to lighting other than just turning the switch on. This lighting system will bring a decorative effect to the surroundings spaces with the use of patterns and shadows. When the light is not on I still want the light to blend in with the environment that they are places in, with the use of woods and Veneers. With this I will be giving the lighting system a natural presence and with thus I will make the light more atmospheric by making the room feel more calm and magical but also fun, with the use of patterns and shadows to change how the light feel when it is switched on I will also be looking into scales which will include a floor light, wall light, desk light and a chandelier and with this seeing how my lights will changes though the sizes I make it.



What?

What are you trying to find out and learn through the research ?  
What are the **research questions** you are asking? What new insights or understandings are you seeking?

I wanted to explore patterns that the light can create with the interaction with an object such as passing though veneers and man-made patterns i.e. holes that have been drillers into the wood to let the light escape and the way that theses holes or other shapes interactor light.

I also want understand what goes to making an effective light shades and how I can produce my own and how I can bring something new to lighting.

Looking at cones and how I can place a pattern with in the lamp shade that creates an atmospheric environment with the shadows that it produces.

Also looking at and exploring Singular lamp shades and also larger scale chandlers and how they change with light and combining this with the use of 3D printing at colour within the cones.

Also looking at where these lights could be placed how they would impact the environment that they are placed in.



Why?

What are the aims and objectives of the research?  
What are you hoping it will achieve? Why is it relevant and worth finding out and who (if anyone) might benefit or what might change as a result?

My aims are to produce a series of lighting products I want my light to bring something more to lighting rather than it just being turned on and that the end of it and to be able to change how a room feels with the use of shadows and patterns that are produce by my lights that I am making. Look at how the mood and atmosphere changes with my lights. I will be designing the light shade for interior designer and not to be sold as single items that can be purchase though a store.



How?

What methods will you use to help answer your research questions?  
How are you approaching undertaking the research? What tools and / or equipment will you need?

I am using various research methods to help me explore my research question such as, online resources, drawing, process experimentation, modelling making both in 3d and using digital process.

The main way that I plan on researching my question is thought practical making where it will predominantly take place in the work shop. Looking at how I am going to make the light works thought a series of way using digital modelling as a first step and then moving on to 3d modelling using the material that I plan on using for the final pieces so, that I can get an understanding of how the material is going to work.

Throughout this project I will be using a selections of tools, such as the steamer for steam bending and jigs also looking and using the laser cutter with the combination of 3d modelling to make section of my work.

I will also be conducting secondary research, looking at other makers in the same area as me in the design world. This will hopefully help to understand the products that are already out there and help me to place myself in the world as a maker/ designer. I see other designers and makers as a source of process and inspiration, helping me to understand what can be done within the area that my project sits.



Who?

What references relate to your subject / topic, who else is working in this area what is the precedent of work in the field? (State of the Art)

While research my area of instruct I came across a lot of designers with the main one such as Tom Raffield, David Trubridge, Neri Oxman and Chihuly as they all work with light and they all use different types of materials and also use different types of methods to produce their work.

I started off by looking at Tom Raffield and David Trubridge as I had research them for my dissertation and also for my second year project where I made a steam bend angle poised. I looked at tom Raffield first to learn about steam bending and how it can be used in lighting, looking thought his website and videos on how he produces work I learnt that process may be low tech but you can produce some lovely items of work that are both visual pleasing and interesting to look at. I learnt valuable aspects about the steam bending process such as the jig is the most important part as this is the form that the wood will take so by making a proper jig that is going to last is the biggest key to success.

David trubridge was another one that I looked at as he's work interested me with working with shadows and that lighting isn't all about light up a space. It's also how light and the shadows can make a room change just with the flick of a switch. His use of laser cutting as a process and how he achieves the same results every time was something that I wanted to experiment.

Neri Oxman was also a big influence even though I didn't go on to using much of the process that she uses which is 3D printing and the different materials that she uses with the main one being glass was something that I would like to explore more. Pairing her with Chihuly both working in glass but Chihuly uses blown glass and combining that with colour was another aspect that I want to try in my own work.

While creating my light I did look at the Fibonacci sequence and how I could have used this in my work. Even though I did not take this any further than just have a look at it and think maybe it could have been used as a pattern for the hole to go onto the cone this would have been something that I should have looked into more detail.

Wainwright, Oliver. 'Meatball Mania: The Top 10 Ikea Products of All Time – Rated'. The Guardian, 29 Jan. 2018. [www.theguardian.com, https://www.theguardian.com/business/2018/jan/29/ingvar-kamprad-top-10-ikea-meatballs-products-rated](https://www.theguardian.com/business/2018/jan/29/ingvar-kamprad-top-10-ikea-meatballs-products-rated).

Lucas, D. (ed.) (2011). Green design (1. ed). Salenstein: Braun.

Ehrenfeld, J. 2008. Sustainability by design. New Haven: Yale University Press.

Walker, S. (2014). Designing sustainability: making radical changes in a material world (First edition). New York: Routledge.

Pario Perra, D. and Gandolfi, E. (eds) (2010). Low cost design. vol. 1: ... Cinisello Balsamo Silvana.

Poole, B. (ed.) (2006). Green design (1st ed). New York, N.Y: Mark Batty Publisher.

Fuad-Luke, A. (2009). The eco-design handbook: a complete sourcebook for the home and office (3rd ed). London: Thames & Hudson.

	<b>When?</b>	When will you do the work, what are the planned stages and milestones?
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June – August: In these months I plan on getting most of the research done so that when I come back to university I can have a clear understanding of what I want the year to look like and have a good understanding of my project.

September: When returning in September I want a clear route to start with so that I'm not overwhelmed with the year ahead. To start the month, I want a good idea of what I want to make so I can start using the workshop right away

October: To have a good understanding of the methods I want to use for the pieces I want to make so that I know how much to push my design and if I need to make any changes.

December: Have a solid idea that I can take in to the new year with, also with all the research out the way so I can focus on the product

January: have all the designing and model/ tests out the way so I can spend rest of the year get all my pieces to a high standard.

February: finish prototyping

March: Due to the outbreak of Covid-19 I had to stop and making and leave the university so I could not finish my work.

	<b>Risk?</b>	What are the health and safety risks and considerations related to your work and how will you mitigate against them?
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Before selling any of my lights I will need them to be PAT tested to make sure that they are safe. Also making sure that all the hardware is CE marked and is up to code.