

## LEARNING PLAN – Yr 7 Technology Mandatory Bio Light

Week	Learning Intentions	Success Criteria
1	<p>The goals of these lessons is to...</p> <ol style="list-style-type: none"> <li>1. Rules and expectations of Oakhill College Teachers &amp; Students</li> <li>2. Locate the Oakhill Learning page</li> <li>3. Hapara - organising folders and naming conventions</li> <li>4. Understand the TAS department and all it has to offer over stages 4 - 6</li> <li>5. Navigate to OnGuard [Digital Technologies]</li> <li>6. Complete OnGuard lessons and quizzes</li> <li>7. Learn the basics of the Design Process - <i>Identifying and Defining; Researching and Planning; Producing and Implementing; Testing &amp; Evaluating</i></li> <li>8. <i>Glossary of Key Words</i></li> <li>9. Drawing Basics - Orthogonal and Pictorial</li> </ol>	<p>I will know I have achieved this goal when I can...</p> <ul style="list-style-type: none"> <li>• Understand the projects being taken this year</li> <li>• Identify the expectations of students in both the classroom and workshops</li> <li>• Understand appropriate use of laptop in the classroom</li> <li>• Follow the design process through a folio</li> <li>• Navigate to the Oakhill Learning website</li> <li>• Found the OnGuard link on the Oak Learning website</li> <li>• I can identify basic drawing formats and techniques</li> <li>• I can fluently use the key words used in the TAS design process</li> </ul>

### Learning Experiences

#### To achieve this goal we will...

- Log into Oaklife and navigate to Oak Learning
- Discuss the TAS facilities and subjects on offer
- Completing the OnGuard training activities
- Glossary of Key Terms uploaded to ePortfolio on Hapara
- Examine the Design Process and Create a digital representation of the Design Process

#### Keywords:

Identifying; Defining; Researching; Planning; Producing; Interpret; Implementing; Testing; Evaluating; Workplace Safety; Design Process; Orthogonal Drawing; Pictorial Drawing; Respectful; Collaboration

#### Resources

[OnGuard](#) - General Workshop Safety; Computing in Australian workplaces; Introduction to Workshop PPE

[Oaklife](#)

[Oak Learning](#) - Technology learning page

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2	<p>The goal of these lessons is to...</p> <ul style="list-style-type: none"><li>• Understand what the focus of this Unit is, including the Design Brief and Assessment Task.</li><li>• Understand Biomorphism as a design principle</li><li>• Research the effect Mark Newson has had on the designing world and his use of Biomorphism.</li></ul>	<p>I will know I have achieved this goal when I can...</p> <ul style="list-style-type: none"><li>• I can state in my own words what the unit of work is about.</li><li>• I can state what things I have to produce in order to successfully complete the assessment task.</li><li>• I can describe what Biomorphism is and how it affects the design of shapes.</li></ul>
<b>Learning Experiences</b> To achieve this goal we will...		
<ul style="list-style-type: none"><li>• View the <a href="#">Biolight assessment</a> task and read through each aspect of the task.</li><li>• Watch videos on <a href="#">Mark Newson</a> in regards to Biomorphism and his work.</li><li>• Watch Video on <a href="#">Biomorphism</a></li><li>• Complete Biomorphism - <a href="#">Information Sheet</a></li></ul>		
- Bio Light <a href="#">assessment task</a>		

Week	Learning Intentions	Success Criteria
3	<p>The goal of these lessons is to...</p> <ul style="list-style-type: none"> <li>• Become familiar with the design process</li> <li>• Understand the meaning of Biomorphic design</li> <li>• Research on Biomorphism</li> </ul>	<p>I will know I have achieved this goal when I can...</p> <ul style="list-style-type: none"> <li>• I can explain what a design process is</li> <li>• I can identify items design in a biomorphic style</li> </ul>
Learning Experiences To achieve this goal we will...		
<ul style="list-style-type: none"> <li>• Start sketching Bio Light candle holder base, Top and Cantilever</li> <li>• Complete a minimum of three scale sketches for each piece</li> <li>• Lesson on Design Brief, how to write.</li> </ul>		
<ul style="list-style-type: none"> <li>- <a href="#">Design Brief worksheet</a></li> <li>- <a href="#">Concept sketching worksheet</a></li> </ul>		

Week	Learning Intentions	Success Criteria
4	<p>The goal of these lessons is to...</p> <ul style="list-style-type: none"> <li>• Know where tools and other things are in the workshop.</li> <li>• Understand what a Risk is</li> <li>• Gain an understanding of the general safety rules in the workshop.</li> <li>• Understand how to log into OnGuard and complete various safety testing</li> <li>•</li> </ul>	<p>I will know I have achieved this goal when I can...</p> <ul style="list-style-type: none"> <li>• I know where tools and other things are in the workshop</li> <li>• Can state the meaning of Risk</li> <li>• I can state the general safety rules in the workshop</li> <li>• I can log into OnGuard and complete various safety tests</li> </ul>
Learning Experiences To achieve this goal we will...		
<ul style="list-style-type: none"> <li>• Be orientated to the workshop.</li> <li>• Discuss risk and decide on examples of workshop risks</li> <li>• Learn the general safety rules in the workshop</li> <li>• Login to onguard and complete safety training and tests.<a href="#">OnGuard Link</a></li> <li>• Complete Biomorphism - <a href="#">Information Sheet</a></li> <li>• Review or be introduced to the <a href="#">Design Process</a></li> </ul>		
Orthographic drawings of project		
<ul style="list-style-type: none"> <li>• Biomorphism - <a href="#">Information Sheet</a></li> <li>• <b>WorkSheet</b> - <a href="#">Design Process</a></li> </ul>		

Week	Learning Intentions	Success Criteria
5	<p>The goal of these lessons is to...</p> <ul style="list-style-type: none"> <li>• Learn about automated manufacturing techniques.</li> <li>• Learn how to program using CAD systems</li> <li>• Learn how to Program the CNC using FNC file types</li> </ul>	<p>I will know I have achieved this goal when I can...</p> <ul style="list-style-type: none"> <li>• I can draw basic sketches using fusion 360</li> <li>• I can export .jpg files from fusion 360</li> <li>• I can import files into CAD CAM wizard</li> <li>• I can explain the different file types and why each machine needs different languages</li> </ul>
Learning Experiences		
To achieve this goal we will...		
<ul style="list-style-type: none"> <li>• Participate in a demonstration and explanation of how to mark out the Top</li> <li>• Introduction to Fusion 360 Download program setup and basic sketching techniques.</li> <li>• complete design for base of the candle holder.</li> <li>• export file as a .jpg and email to the teacher.</li> <li>• complete demonstration on the CNC machine</li> </ul>		
<ul style="list-style-type: none"> <li>- <a href="#">Marc Newson News feed</a></li> <li>- <a href="#">CNC Machine video</a></li> </ul>		

Week	Learning Intentions	Success Criteria
6	<p>The goal of these lessons is to...</p> <ul style="list-style-type: none"> <li>• Understand about automated manufacturing techniques</li> <li>• Learn how to cut curves using a coping saw</li> <li>• Learn to set the blade of the coping saw</li> <li>• Learn how to setup and drill using a pedestal drill</li> </ul>	<p>I will know I have achieved this goal when I can...</p> <ul style="list-style-type: none"> <li>• Describe the difference between manual process and automated processes.</li> <li>• setup a coping saw with the blade facing the correct way</li> <li>• use a coping saw to cut the curves on my job</li> <li>• setup and drill the holes on my candle holder using a pedestal drill</li> </ul>
Learning Experiences To achieve this goal we will...		
<ul style="list-style-type: none"> <li>• Participate in the machining of the bases using the CNC machine.</li> <li>• Participate in a demonstration and explanation of how to cut out the top using coping saw.</li> <li>• Participate in a demonstration and explanation of how to Drill 48mm blind hole in the top for the candles to sit in.</li> </ul>		

Week	Learning Intentions	Success Criteria
7	<p>The goal of these lessons is to...</p> <ul style="list-style-type: none"> <li>identify the different file types and techniques</li> </ul>	<p>I will know I have achieved this goal when I can...</p> <ul style="list-style-type: none"> <li>Describe a couple of file shapes and types</li> </ul>
<b>Learning Experiences</b> <b>To achieve this goal we will...</b>		
<ul style="list-style-type: none"> <li>Participate in a demonstration and explanation of how to file the edges of the top piece</li> <li>commence marking out cantilever</li> <li>Cut out cantilever with coping saw</li> <li>File edges of cantilever</li> </ul>		

Week	Learning Intentions	Success Criteria
8	<p>The goal of these lessons is to...</p> <ul style="list-style-type: none"> <li>different joining techniques between the base and the cantilever</li> </ul>	<p>I will know I have achieved this goal when I can...</p> <ul style="list-style-type: none"> <li>describe the joining method to attach my cantilever to my base</li> </ul>
<b>Learning Experiences</b> <b>To achieve this goal we will...</b>		
<ul style="list-style-type: none"> <li>Participate in a demonstration and explanation of how to join the cantilever to the base</li> <li>Participate in a demonstration and explanation of how to join the cantilever to the top</li> </ul>		



Week	Learning Intentions	Success Criteria
9	<p>The goal of these lessons is to...</p> <ul style="list-style-type: none"><li>• Apply a final finish to my Candle holder</li></ul>	<p>I will know I have achieved this goal when I can...</p> <ul style="list-style-type: none"><li>• Successfully apply finish to the Candle holder</li></ul>
<b>Learning Experiences</b> To achieve this goal we will...		
<ul style="list-style-type: none"><li>• Sand and finish Bio light candle holder</li></ul>		