

Make your notes separately as dot points in either in a notebook, a text document, or on the lecture slides

SUBJECT:

Lecturer:	Lecture #	Today's events:	Date:
<b>Lecture topic:</b> <i>Preview – the night before</i> <b>Themes:</b> familiarisation, context, main points, topics	<b>Review – consolidate from your lecture notes and readings- after the lecture</b> <b>Description:</b> What are the details? Key explanations? What are the processes? What is the supporting evidence/example? What is the interpretation?		<b>For revision</b> <b>References:</b> readings; text book page; links
Context:  Topic 1: Subheading  Subheading  Topic 2: Subheading  Subheading  Topic 3: Subheading  Subheading  New terms:	<div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; padding: 5px; width: 45%;">Descriptions</div> <div style="border: 1px solid black; padding: 5px; width: 45%;">Diagrams</div> </div> <div style="border: 1px solid black; padding: 5px; width: 45%; margin-top: 10px;">Definitions</div> <div style="border: 1px solid black; padding: 5px; width: 80%; margin-top: 10px; display: flex; justify-content: space-between;"> <div style="width: 45%;">Align relevant information against the headings in column 1</div> <div style="width: 10%; text-align: center;">Use these headings as a checklist for detail</div> <div style="width: 45%;">Explanations</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px; width: 45%;">Examples</div> <div style="border: 1px solid black; padding: 5px; width: 45%;">Equations</div> </div> <div style="border: 1px solid black; padding: 5px; width: 80%; margin-top: 10px;">Interpretations</div> <div style="border: 1px solid black; padding: 5px; width: 60%; margin-top: 10px; text-align: right;">Extend this section to as many lines/pages as needed</div>		<div style="border: 1px solid black; padding: 5px; width: 100%; text-align: center; margin-top: 10px;">Align links &amp; references against details in column 2</div>
<b>To finish off – take 5 minutes to reflect in your own words</b> <b>Interpretation:</b> What is the purpose of this lecture? What is the take home message? Is there an underlying message? How does this topic link with previous lecture topics and tutorials? How does this relate to readings? What questions should I ask myself?			

Example of part of a lecture. The full lecture extends over several pages

SUBJECT: *BC3203 Bioinformatics*

Lecturer: <i>Ira Cooke</i>	Lecture # <i>7</i>	Today's events: <i>housemate's birthday</i>	Date: <i>16/09/2019</i>
Lecture topic: <i>Statistical analysis of microbial data</i>			
<b>Preview – the night before</b> <b>Themes:</b> familiarisation, context, main points, topics	<b>Review – consolidate from your lecture notes and readings- after the lecture</b> <b>Description:</b> What are the details? Key explanations? What are the processes? What is the supporting evidence/example? What is the interpretation?		<b>For revision</b> <b>References:</b> readings; text book page; links
<p><u>Topic 1:</u> Diversity metrics in microbial ecology</p> <ul style="list-style-type: none"> <li>• Alpha and beta diversity</li> </ul> <p><u>Topic 2:</u> Measures of diversity can be:</p> <ul style="list-style-type: none"> <li>• Qualitative &amp; quantitative</li> <li>• Phylogenetic &amp; non-phylogenetic</li> </ul> <p><u>Topic 3:</u></p> <ul style="list-style-type: none"> <li>• Methods to interpret diversity metrics           <ul style="list-style-type: none"> <li>- Hierarchical clustering (see reading section)</li> </ul> </li> </ul>	<p>Alpha diversity: diversity <i>within</i> a sample</p> <ul style="list-style-type: none"> <li>- Used for individual samples</li> </ul> <p>Beta diversity: diversity <i>between</i> samples</p> <ul style="list-style-type: none"> <li>- Used for multiple samples</li> <li>- Are <i>distances</i></li> </ul> <p><u>Diversity metrics can be:</u></p> <p>Qualitative:</p> <ul style="list-style-type: none"> <li>- Used for presence/absence</li> </ul> <p>Quantitative:</p> <ul style="list-style-type: none"> <li>- Account for abundance</li> </ul> <p>Phylogenetic:</p> <ul style="list-style-type: none"> <li>- Use evolutionary relationships</li> </ul> <p>Non-phylogenetic:</p> <ul style="list-style-type: none"> <li>- Are all treated equally</li> </ul>		<p>Read clustering chapter in Modern Statistics for Modern Biology for next week:</p> <p><a href="http://web.stanford.edu/class/bios221/book/Chap-Clustering.html">http://web.stanford.edu/class/bios221/book/Chap-Clustering.html</a></p>
<p><b>To finish off – take 5 minutes to reflect in your own words</b></p> <p><b>Interpretation:</b> What is the purpose of this lecture? What is the take home message? Is there an underlying message? How does this topic link with previous lecture topics and tutorials? How does this relate to readings? What questions should I ask myself?</p> <p>Know the different alpha and beta diversity measures (when are they used? How are they classified? What are their limitations? How are they calculated?)</p> <p>Builds on to how to interpret diversity metrics using clustering and multidimensional scaling</p>			