

Submission Marking Criteria (BIO00052M)

The submission will be marked out of 100 using the following marking scheme.

Word Count: There is no strict word limit for this assessment but the submission should be sufficiently and concisely annotated. We recommend no more than six figures to describe the results.

Mark weighting by section: Marks will be awarded for appropriate and accurate use of statistics (40% of the marks), for appropriate figures with descriptive captions (30% of the marks), and for accurate, well annotated R code provided as part of a zipped R project (30% of the marks).

Marks can fall between these bands, the requirements for each band are given in more detail beneath.

Outstanding (80-100): An excellent submission. Very well presented and succinctly written. Excellent use of non default design elements in figures and very clear code annotation.

Excellent (72-78): Very good submission. Well presented figures and text with non default design elements.

Good (62-68): Good submission. Easy to read and logically presented.

Satisfactory (52-58): Reasonable submission

Weak (42-48): Weak, very short or large quantity of low quality results

Compensatable Fail (30 - 38): Inadequate submission, rationale unclear, results lacking. Substantial misunderstanding and poor presentation.

Outright Fail (0-25): Very poor, short or completely inappropriate. No useful results or understanding. No useful figures/tables

Stepped marking criteria for projects

Mark (%)	Statistics	Figures	R code	Overall
100 95 90 85 80	Data thoroughly analysed using accurate, correctly applied and appropriately justified statistics. Only the correct elements of the output used (and nothing more) where needed.	Exceptionally high quality presentation. Figures are at/near publication standard . Only appropriate figures with very clear captions that are easy to understand as 'stand-alone' items . Excellent use of legends, axis labels, and other design elements. s.	Working code to produce all statistics , figures and summaries used in the submission. Excellent annotations within the code.	Outstanding: Excellent. Very well presented and succinctly written . Excellent use of non default design elements in figures and very clear code annotation. 100: No room for improvement. Text and figures are publication quality. States the key findings concisely and clearly 95,90: Minor room for improvement: Almost publication quality figures. Clear understanding of the analyses performed. Complete and concise annotations with appropriate level of detail. 85,80: Good understanding of the analyses demonstrated in text. Figures make use of lots of non default design elements such as themes and plot annotations. May still include some minor unnecessary detail in text. Code is well annotated but may contain too much detail.

Mark (%)	Statistics	Figures	R code	Overall
78 75 72	Correctly applied and appropriately justified with the correct elements of the output used where needed. May include some extra information that is not required.	Very clear figures with good captions that work as 'stand-alone' items. Clear consideration of the various design elements.	Working code to produce all statistics, figures and summaries used in the submission , although some extra tests may be included that are not used . Clear annotations within the code. Code is well laid out and easy to follow however there may be style inconsistencies in the use of space/readability of code.	<p>Excellent: Very good. Well presented figures and text with non default design elements.</p> <p>78: Well presented and effective use of statistics. Code annotation text focuses on key results. Code and submission is well structured in an easy to read layout</p> <p>75: Well presented but code may contain some inconsistencies in use of white space or have additional spaces around functions.</p> <p>72: Well presented, however code layout may have less style consistency. Key findings stated, but additional extra details about these findings presented.</p>

Mark (%)	Statistics	Figures	R code	Overall
68 65 62	Nearly all statistics correctly applied and justified using the R output where needed. There may be some information missing or lots of extra information that is not required (e.g. complete default output from R).	Sufficient figures with captions that can be mostly understood as 'stand-alone' items. Maybe lots of default design elements or some inappropriate figure style.	Mostly working code to produce all statistics, figures and summaries, although there may be some problems with running code. Could be R code for alternative tests and figure drawing included that are not used in the text. Some annotations within the code. Organisation of code and folder structure of submission is appropriate with correct usage of Rproject and data file included in a sensible format.	<p>Good: Good. Easy to read and logically presented.</p> <p>68: Good narrative text. Figures clear but may contain default themes and no annotations. Good code organisation and correct usage of Rproject. File/variable names meaningfully named.</p> <p>65: Figures clear but may have superfluous code/may be included in the quarto document more than once.</p> <p>62: Files mainly organised appropriately but could contain unnecessary/nested folders. Reasonable interpretation of the results however the results may not be fully interpreted.</p>

Mark (%)	Statistics	Figures	R code	Overall
58 55 52	Some inappropriate statistical analysis applied, or appropriate analysis not sufficiently justified. May be chunks of information missing or lots of extra information that is not required (e.g. complete default output from R).	Figures reasonable but captions not sufficient to act as 'stand-alone' items. Not a good match of data to figures used. Maybe figures don't match the text or statistics applied. Missing information (such as axis labels).	Code not sufficiently annotated to produce all statistics, figures and summaries used without editing or may be several problems with running code. Could have lots of alternative tests and figure drawing included that are explained. Few good annotations within the code or lots of inappropriate annotations.	<p>Satisfactory: Reasonable code and layout/readability will impact where the mark falls within this band.</p> <p>58: Code annotations exist, but will be quite limited. Figure formatting could be improved. Additional figures may be presented that are unnecessary. Some misunderstandings of statistical tests/R</p> <p>55: Inconsistent/unintuitive variable naming and layout of code is difficult to follow. may have lots of long run on lines of code.</p> <p>52: Some misunderstanding of some statistical tests/justification or the outputs</p>

Mark (%)	Statistics	Figures	R code	Overall
48 45 42	Lots of inappropriate statistical analysis applied and lack of justification for what has been done. May be large chunks of information missing or lots of extra information that is not required (e.g. complete default output from R).	Figures present but captions missing or definitely not sufficient to act as 'stand-alone' items. Poor match of data to figures used. Figures don't match the text or statistics applied. Lots of missing information (such as axis labels).	Code not annotated and unable to produce statistics , figures and summaries used in the text. Many problems with running code . Few annotations within the code or lots of completely inappropriate annotations .	<p>Weak: Weak, very short or large quantity of low quality results. Degree of misunderstanding of statistical analysis or degree to how well the figures match the data will determine which mark within this range. Both text and code layout is difficult to read.</p> <p>48: May be able to run the code, but the methods used indicate misunderstanding. Several elements of the submission such as the dataset to read in may be missing.</p> <p>45: Code difficult to run and figures generated may either be poorly formatted or be poorly interpreted.</p> <p>42: Code is very difficult to run, or code that runs does not match with the annotation/suggests misunderstanding.</p>
38 35 30	Statistics used are inappropriate and unjustified . Dataset is not analysed effectively at all.	Any figures present missing captions and other design elements. Tables or figures do not match the text or statistics applied.	Not present or not functional. No annotations	<p>Compensatable Fail: Inadequate submission, rationale unclear, results lacking. Substantial misunderstanding and poor presentation. May contain significant errors.</p> <p>38: 1 fail indicator but other aspects indicate a 40+ mark.</p> <p>35: 1 fail indicator</p> <p>30: 1 fail indicator, and partially an addition fail indicator</p>

Mark (%)	Statistics	Figures	R code	Overall
25 15 8 0	Very poor, extremely short, or completely inappropriate. No useful results obtained. No understanding demonstrated. No useful figures or tables.			Outright Fail: Very poor, short or completely inappropriate. No useful results or understanding. No useful figures/tables 25: 2 fail indicators 15: 3 fail indicators 8: All fail indicators 0: No submission or an outline with very little content.
	Fail indicators F1: Fails to demonstrate an ability to generate/ test a hypothesis. F2: Generates very inappropriate figures. F3: Fails to generate and/or describe any results. F4: Exceptionally poorly written and presented.			