Assessment Brief 2025-26

How you'll be evaluated?

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Summative Assessment Brief

This Module covers the following courses:

- MSc/MRes Applied Ecology & Geospatial Techniques
- MSc/MRes Biodiversity Conservation
- MSc/MRes Endangered Species Recovery & Conservation
- MSc/MRes Equine Performance, Health & Welfare MSc/MRes Smart Agriculture

Formative Assessments

Your formative opportunities are related to the development of your workbook and sharing of this development with module leader and colleagues.

> **Share your Workbook**
>
> You must not be shy or embarrassed to share your workbook. Nobody will judge you. We are all learning!

Type of Assessment

Your Summative is to produce an dynamic document (i.e. a simple Quarto document) containing an analytical workflow for a given dataset where critically interpret the results and draw your conclusions.

Step 1 - Context

You will be given a context of a scientific problem. This context will introduce you to a real-world problem that is going to be used as a background for the data that you are going to analyse.

Step 2 - The dataset

You will have access to a pre-built dataset in a `.csv` format that will contain all the data and metadata needed for your analyses. The data is the same for everyone and I am not providing data on your specific subject of studies.

Step 3 - Your Workbook

You are going to work on the assessment using your **Quarto workbook** constructed over the course of the whole module. This is going to be your submission. I'll collect your exams using a NOW Dropbox where you can paste the link to your published workbook.

> **Note**
>
> The **dataset** and **context description** for the Summative exam will be shared by the end of the module sessions (probably in the last week of classes).

Transferable skills developed in this assessment

Analytical workflow

- Create and attach to an analytical workflow that is reproducible
- Generate good quality graphs and tables
- Comment and understand R code
- Identify core results within a set of exploratory analyses.
- Interpret and generate conclusions based on data analysed

Specific tasks

- Design an experimental design
- Describe methods for reproducibility
- Create a analytical workflow
- Comment on the R codes in your **workbook**

Assessment Guidance

- Analytical workflow (15%)
- R code commented (15%)
- Exploratory analysis (20%)
- Quality graphs and tables (25%)
- Interpretation of results (25%)

Further information

- Extenuating circumstances

Grading Matrix

Criteria	Fail Low | Mid	Marginal Fail	Pass Low | Mid | High	Commendation Low | Mid | High	Distinction Low | Mid |High	Distinction Exceptional
Analytical workflow	No clear analytical workflow	Workflow not easy to find; mixed analytical approach in search for any significant p-value	Workflow relatively reasonable but with excess of flaw analyses and lack of a logic sequence that goes from 1) preparation; 2) data wrangling; 3) Exploratory analyses; 4) Core analyses	Clear workflow but hard to reproduce because crucial steps were either omitted or non commented.	Very good workflow with clear guidance for reproducibility	High quality workflow, fully reproducible and extensively commented
R code commented	Little to no comments on coding	Comments provided but non meaningful for crucial steps	Codes mostly commented but crucial steps are not udnerstood	Codes mostly commented and helping reproducibility.	Codes fully commented but not excessively, avoiding visual pollution	Codes fully commented and not affecting visual inspection of the script and allows full reproducibility and explanation in key steps
Exploratory analysis	No exploratory analyses done	Insufficient exploratory analyses	Enough exploratory analyses but not commented or justified	Good exploratory analyses but poorly commented and little justified	Very good exploratory analyses, commented and justified	World-class and fully justified exploratory approach to data

Criteria	Fail Low | Mid	Marginal Fail	Pass Low | Mid | High	Commendation Low | Mid | High	Distinction Low | Mid |High	Distinction Exceptional
Quality graphs and tables	Poor graphs, lacking crucial elements such as axis title and captions	Poor graphs and tables with some elements present but poorly explained while other elements are missig	Graphs and tables present with most elements, but some missing components preclude full understanding of the info presented	Graphs and tables of acceptable quality with all elements present but not clearly descripted	Good quality graphs and tables that could be accepted for publication in any serious scientific journal	Outstading graphs and tables with graphical abstracts and schematic figures. All elements present and fully explained.
Interpretation of results	Poor or inexistant critical interpretation of the results found	Deficient interpretation of the results and misuse of statistical concepts and wrong translation of tests and graphs	Results are just reported with no critical interpretation or further discussion	Results correctly reported and critically interpreted but excessive speculation is present	Results are fully reported in a correct manner with string attachment to the proposed workflow and are discussed without much speculation	Excellent interpretation, creative and fully connected with scientific hypotheses