

## BIOL2022 MODULE 2 WEEK 7 prac notes

- 80 % time data checking and ready for analysis: 20% time analysing stats
- STEP 1: SCRUTINISE DATA:
  1. Data checking:
    - Pivot tables
    - Filters
  2. Check – does it make sense?
  3. Potential outliers – decisions:
    - cause? Any errors need fixing? Other?
    - include/exclude?
    - usually do NOT delete; or analyse both with and without
    - be transparent in your Methods section about your decisions
  4. ONCE ALL OK, go to Step 2
- STEP 2: rough plots of data – e.g. in excel – are they what you expect?
- STEP 3: make sure you have 1 worksheet as a clean data array to import into stats package; appropriate and clean
- STEP 4: STATS and PLOTTING GRAPHS:
  1. import, analyse, check diagnostics/assumptions
  2. know what stats matter from the output – there are lots of them!
    - Only some/key stats need to be included in your report
    - Do not copy and paste stats output from your stats package
    - DO type the key stats results up yourself and *only include what matters* – that way we know you know what matters.
  3. check assumptions if any are associated with your stats analysis:
    - in your Methods section of your report: say what/whether you have checked, whether they were met, if not, what did you do?
    - in your report DO NOT present normality plots or plots of residuals
  4. Prepare your formal plot(s) for your report.
    - You may present the plot produced by your stats package.
- STEP 5: Group excel file for Canvas
  1. Ensure your group Excel file is complete with the minimum two worksheets, with both (1) metadata sheet and (2) clean data array you imported into your stats package
  2. Upload your Group excel file to Canvas
- Step 6: at the end of the prac (preferably by end of Week 8, if not, Week 9), you should leave being absolutely clear of what you have done, why it is appropriate what you have discovered, and what and how you will present your stats and plots in your report.