

ENVS422: Structure of this course

- 12 lectures over 6 weeks
- Exercise each week, to be handed in the following Wednesday. Counts 30% of total mark (i.e. 5% each week).
- 3 hour workshop each week, spent analysing data, testing hypotheses, building up a report (Max 4000 words, due at end of course) which will count 50% of the total mark.
- 2 sessions of presentations, the first highly interactive (to get feedback on whether your conclusions are watertight and on how to test them further), the second assessed (15% of total mark)
- Discussion of papers chosen by you (1 each), to determine whether the data analysis component is sound. Report (up to 1000 words) on your conclusions (5% of total mark).

Concerning your final report:

- The report should be in two sections.
- The first should describe, as clearly and succinctly as possible, the hypotheses you have made and final conclusions you have drawn from your data analysis, and the analyses which support those conclusions.
- The second should go into the detail of the tests you have done to ensure that the conclusions are robust (from quick checks of alternatives to detailed statistical analyses).
- The balance between the sections is up to you, but I would expect the second to be larger (e.g. in the first you would note “this was found to have a 3% possibility of happening by chance”, and in the second you would explain this analysis).
- Good quality illustrations are important, as is clear, logically reasoned analysis.
- It does not matter if your hypothesis was wrong, or if the data turn out to be inadequate to address the question. What matters is that you identify this clearly.

Concerning the dataset and analysis

- This must be distinct from your research project. Work done here cannot count for both.
- However, the point of this module is to help you with your research project, so it makes sense to involve data with a similar character and develop tools that you can use for both (perhaps do analyses in parallel).
- You will get most from this if you involve a large dataset (e.g. a time series of maps from satellites or ocean models), if only to add context to the dataset you are focusing on.
- It is hard to draw strong conclusions from small datasets! The more numbers you have, the better.