Guidelines

* 12 + 3 minutes long
* A printed copy of the slides should be given to Christine on the day of the presentation
* Talks should contain:
  + A brief introduction with a statement of the dissertation aims/objectives, some information on the wider context of the dissertation project
  + Description of methodology
  + Major results found
  + Discussion and interpretation of the results with reference to published literature
* Ask yourself: which bits of my project will the audience be able to digest in 12 minutes

Notes:

* Could just remove the morphology stuff and focus on the physiology side of it

Dissertation Summary

* The ranges of tropical tree species are shifting in response to climate change
* Mainly due to an increase in temperature
* Many models of species range shifts have used “bioclimatic envelopes” to predict how a species will migrate as it gets warmer.
* But a lot of these models don’t take into account that (a), other things will change as species move upslope, and (b) that species will differ in their ability to acclimate to this variation
* This could lead to a reduction in fitness for some individuals
* Methods:
  + Picked 9 tree species and investigated how their stress levels and morphology changed across an elevational gradient
  + We then looked at how 3 different competition interactions plant traits and how this compared to that of elevation.
  + Plant traits measured were split between physiology and morphology
    - FvFm & SPAD
    - Leaf thickness, Leaf area, L:H ratio, Stem volume.
* Results
  + Plant species did vary in their trait response to elevation,
    - FvFm was lower at the bottom of species ranges, perhaps implying that they are experiencing temperature stress there.
    - No species is experiencing lower fvfm at higher elevations, implying that competition interactions are having little effect at the top of species ranges
  + I found that morphology and physiology did vary in response to above and below ground adult-seedling competition but not seedling-seedling competition
  + Competition effects never had a greater effect than that of elevation on any of the plant traits
* Conclusions
  + Seems clear that species are reacting differently to elevation
  + But no species looks like it’s experiencing stress…yet
  + Ideally, for range shift models to become more accurate and precise, competition interactions should be included in range shift models
    - But given that it takes so much effort to properly measure competition interactions in the field, and that they contribute actually relatively little to the
* Future questions
  + Will the stress caused by temperature at lower elevations cause the base of some species ranges to progress upslope faster than the upper limit can expand upslope?
  + Will the physiological stresses seen here translate to higher mortality?
  + Are the effects seen here comparable in adult trees?

# Honours Dissertation Presentation - Assessment Sheet

**Student: «First\_name»**

**Title:** «Proposed\_Title»

**Assessor: «Talk\_marker\_1» / «Talk\_marker\_2»**

**Content** **Mark/100 Notes**

Clear statement of question/objective \_\_\_\_\_\_\_\_\_\_\_

Clear description of the methodology \_\_\_\_\_\_\_\_\_\_\_

Critical evaluation of evidence (positive and negative) \_\_\_\_\_\_\_\_\_\_\_

**Presentation**

Organised, logical structure \_\_\_\_\_\_\_\_\_\_\_

Timing (within time limits, but not too short) \_\_\_\_\_\_\_\_\_\_\_

Is presentation creative/original? \_\_\_\_\_\_\_\_\_\_\_

**Communication**

Quality of overheads, or other visual aids \_\_\_\_\_\_\_\_\_\_\_

Delivery and stage presence (voice clarity, volume, etc.) \_\_\_\_\_\_\_\_\_\_\_

**Comments** (continue on reverse)

**Marker’s grade (average of above):** \_\_\_\_\_\_\_\_\_\_\_

**Final grade (please record final grade as an integer)**

Final Grades of the two Assessors differ by 10% or less.

The Grade awarded is the mean of the Final Grades.

**OR**

Final Grades of the two Assessors differ by >10%.

The Assessors must agree on the Grade awarded

and explain below how agreement was reached.

Explanation of how the agreed grade was reached