

## Ecology – Research Report 1 Assignment

**Topic:** Phenotypic plasticity in leaf stomata lab

**Due:** February 5, promptly at the beginning of class

**Length:** Long enough to include all important information described below. This will probably be *at least* four pages of text (typed, double-spaced, normal-sized font and margins).

**Grading:** This assignment is worth 100 points. Your report will be graded on content as well as format and clarity. The report will not be judged on length, but on whether it includes all essential information. Refer to the paper checklist to see what I'll be looking for in each section. This is a big chunk of your grade, and I expect a major effort on this assignment. You will be held to a high standard, for both content and clarity!

**Content:** Your research report will follow the general format of scientific journal articles. In your research report, you should tell the reader what your research question was (introduction), what was done (methods), what you learned (results), and how your results relate to the research question (discussion). These components of the research report are explained below. Also refer to the checklist to make sure that your report meets the requirements that it will be graded on.

Abstract – concise summary (approximately 200 words):

- why the research was done
- hypothesis/specific research question
- methods
- results
- conclusion

Introduction – what is the question?

- specific hypothesis/prediction/goals
- \* note: your second research report will include a longer introduction

Methods – how was the question addressed?

- what, where, when, **how**, why
- treatments, controls, measurements
- analyses (what, how, **why**)
- NOT a list (and not restating the lab handout!)
- enough detail to allow a fellow researcher to repeat the experiment

Results – what are the results?

- explain results
- refer to figures and/or tables
- no redundancy between figures or tables and text
- relate results to hypothesis

Discussion – what do your results mean?

- summarize results
- conclusion about hypothesis (in light of the results)
- \* note: your second research report will include a longer discussion

Tables and Figures

- with captions, axes labeled
- at end of report