

Guidelines for Grading BIOL 314 Lab Reports

As described in the syllabus, of the 100 points available for each report, 60 depend on scientific merit and 40 on clarity and quality of writing. In the sections below, the total available points are further broken down to clarify the weightings of the various components described in the syllabus. The section of the syllabus describing the lab reports is appended for your convenience.

Scientific Merit (60 pts)

1. *Relevant background information provided (5pts)*
2. *Hypotheses clearly stated (15pts)*
3. *Appropriate statistical tests used and details (e.g., df , p values, etc.) provided (15pts)*
4. *Well-defined relationship between hypotheses, statistical tests, and results (10pts)*
5. *Clear statement of relative support for alternative hypothesis (10pts)*
6. *Appropriate use and citation of references (5pts)*

Clarity and Quality of Writing (40 pts)

1. *Appropriate formatting (10pts)*
2. *Logical flow of argument (10pts)*
3. *Use of clear and concise sentences (10pts)*
4. *Spelling and grammar (10pts)*

From the Syllabus

Laboratory reports:

The goal of laboratory reports is to clearly and concisely communicate scientific results. Laboratory reports must be prepared using a word processor and turned into your TA by the appropriate due date (see schedule below) as either a hard copy or a standard digital format (i.e., Word or PDF).

Reports may not exceed two pages and must be prepared using a font of size 10 or greater. Each report must contain the following sections:

- Summary – Begin your report with a concise summary of your findings. Clearly state the hypothesis being tested, methods used, results found, and an evaluation of support for the hypothesis. The summary should be in bold face type and *must not exceed 200 words*.
- Introduction – A single paragraph describing the data set and the hypothesis to be tested.
- Methods – One to two paragraphs describing the approach you took to analyze the data. Include details of all statistical tests used and any assumptions made during your analysis.
- Results – One to two paragraphs describing results of your analyses. Provide statistical details (e.g., p values and degrees of freedom) where appropriate. Using tables and figures to summarize your results is encouraged, but these must fit within the two page limit for your report. Be sure to explain why each result matters, and how it helps to evaluate support for the hypothesis.

Grading of laboratory reports:

Laboratory reports must be turned in by the date specified in the lab schedule (see table below). These reports will then be graded by your teaching assistant and returned to you within one week along with detailed comments. If you are unsatisfied with the grade you received, you may revise your report in light of the comments made by your teaching assistant and turn in it again for a re-grade. You are strongly encouraged to discuss the suggestions made by your TA prior to turning in a revision as only one revision is allowed per report. All report revisions must be turned in to your teaching assistant prior to May 5.

Grade breakdown for laboratory reports:

Scientific merit	60 points
<u>Clarity and quality of writing</u>	<u>40 points</u>
Total	100 points