Biology 110, 220W, 230W, 240W – Lab Report Grade Summary

Each of the following components will be evaluated and given a score based on the following:

- **EXCELLENT:** The assignment includes all required elements correctly done.
- **VERY GOOD:** The assignment includes almost all required elements correctly done.
- **GOOD:** The assignment includes most elements correctly done.
- **FAIR:** The assignment includes some elements correctly done.
- **POOR:** The assignment has most elements incorrectly done, with substantial errors.
- **INCOMPLETE/UNACCEPTABLE:** Parts of the assignment are missing or the work is of unacceptable quality.

The following criteria will be considered when grading each of the designated components of your lab report:

**I. READABILITY:**
- The work is cohesive, with clarity of prose throughout.
- The work is concise and shows effective transitions at appropriate points.
- There is a logical flow between the assigned sections without distractions.
- Good grammar is observed throughout and there are no, or minimal, misspellings.
- Authors, course and section, instructor, and date clearly identified on a separate title page.

**II. INTRODUCTION AND TITLE**
- Title less than 15 words, includes the name of the model organism (*Genus species*) and the independent and dependent variables.
- Sufficient background information (without excessive background).
- Concise and clear statement of purpose.
- Concise and clear statement of hypothesis and predictions resulting from hypothesis.
- Brief statement (1-2 sentences) of methods and analysis (procedure).

**III. MATERIAL AND METHODS**
- States procedure with enough detail to allow the reader to repeat the experiment.
- Describes the steps of the procedure in order and the reasons for each (does not list the steps).
- Describes how the raw data was crunched and includes all calculations or formulas needed to obtain the final results.
- Do not include excessive detail!

**IV. RESULTS**
- A clear and concise presentation of experimental data is provided, including all of the required tables and the required figures.
- Superfluous data are not included, and pooled data are adequately condensed and organized.
- Figures and Tables are numbered consecutively throughout the paper.
- Figure and Table titles are properly located (above for tables, below for figures.)
- Figures and Tables are properly constructed and contain adequate descriptors so that they can stand alone.
- Figures and Tables are appropriately referred to within the paragraphs that are used to describe results, using the word *Figure* or *Table*, followed by its number, for example, "(Figure 1)." (If possible, each figure or table should be placed at the end of the sentence or paragraph in which it is cited.)
- Clear descriptions of the trends in the data are stated.
- The student does not report what was *expected* to happen in the experiment.
- Interpretations of results are not presented in this section.
V. DISCUSSION:

- The student briefly restates necessary background information, purpose of the assignment, and hypothesis (as described in the Introduction section).
- Interpretations of data are made.
- Clear and precise explanations of how the basic course concepts and the data at hand relate to the problem, hypothesis, or question that is being addressed.
- The student clearly understands the advantages/limitations of the experiment and possible sources of error.
- Conclusion regarding the hypothesis being tested is made.
- New questions and experimental ideas are generated.
- Overall significance and implications of study are suggested.
- Closure is provided.

*Do not use the word *prove* when stating your conclusion. Your results will *support, verify, or confirm* your hypothesis, or they will *negate, refute, or contradict* your hypothesis; but the word *prove* is not appropriate in scientific writing.

VI. REFERENCE(S):

- In scholarly writing, ALL sources must be appropriately cited in text (APA format), and the cited reference(s) must be compiled at the end of the report.

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