

BIOL366 Lab Report Rubric	Exemplary (10)	Satisfactory (7)	Needs Improvement (3)	Score
<b>Content</b>				
<b>Title Page &amp; Abstract</b>				
Title, name, course, instructor, semester	Contains title, name, date, course, instructor, semester; Title is a clear and concise statement that indicated the topic that you are writing on	Missing one of the following (course, instructor, semester) except title or name; Title is too long and provides too much information that is not concise or indicative of the topic	Missing more than two of the following (course, instructor, semester), or the title, or the name; Title is lacking all together	
~300 word summary of your paper including the purpose, hypotheses, and major findings	Abstract is a compelling summary of the main points of the research. Hypotheses are clearly stated along with primary results. Significance of the research is apparent.	Abstract states hypotheses, rational, and major results.		
<b>Introduction</b>				
Explanation of topic	Presents a concise lead-in to the report by explaining what the topic of the report is; defines any broad topic / title topic terms that provides the reader with a background of the report	Provides some background to the topic, but not enough to fully understand the topic, or is not concise.	Little background information if any is background is provided.	
Objective Statement / Hypotheses	The objectives of the research are presented and both null hypotheses are testable and clearly stated. The ecological rational for each hypothesis is clear.	Some but not all hypotheses are present but not clear; ecological motivation is clear for hypotheses stated.	No hypotheses are stated or their ecological rational is unclear.	
<b>Methods</b>				
Describe how the study was conducted; written in the past tense	Presents easy-to-follow methods for different part of the laboratory which are logical and adequately detailed; data analysis methods stated; statistical p-value to be used is stated.	Most of the steps are understandable; some lack detail or are confusing. Data analysis not adequately described.	Presentation of methods is not sequential, is missing many steps are missing or are confusing.	
<b>Results</b>				
Presentation of your data, written in past tense	Clear and concise report of the data that clearly addresses the research questions and hypotheses. Results are reported in the same order as the methods presentation; major findings written first for each category, followed more detailed information; General trends and major point of all figures and tables are described.	Results reported are accurate, but either not all results are reported or the presentation is unclear. Major findings and details for each categories may be jumbled; Reference to tables or figures was simple reinstatement of data in the figure or table.	Results are inaccurate, misstated or not reported.	
<b>Discussion</b>				
Your interpretation of the results; Significance of the results and sources of error	Presents a logical explanation for findings and addresses all of the questions and hypotheses; explanation of any sources of error.	Presents a logical explanation for findings and addresses some of the questions.	Presents illogical explanations for findings and does not address research questions or hypotheses.	
<b>References &amp; Citations</b>				
Use the style and format of in-text and Reference citations currently used in the journal Ecology. Cite at least 5 sources from the primary literature (peer reviewed journals)	All references listed and properly formatted; citations are used appropriately throughout the text.	All references listed, but not properly formatted; or not all references listed, but were properly formatted; 1-2 citations obviously missing or formatted incorrectly	Incomplete number of references or references not cited.	
<b>Figures &amp; Tables</b>				
	Figure legend(s) accurately describe the figure and provide enough information to stand alone without referring back to the text; are located below the figure itself. Figure legend(s) are listed below the figure.	Figure legend(s) is/are presented at the bottom of the figure. Figure legend(s) include(s) the number (e.g. Fig. 1), but does not accurately describe the figure; or does not include the figure number; or is placed above the figure itself	No figure legend(s); No horizontal lines breaking the header from the data and or multiple vertical lines present	
	Table legends (titles) has table number and accurately describes the table and provide enough information to stand alone without referring back to the text; are located above the figure itself. Tables are have only 3 horizontal lines, 1 below the title, one below the boxhead, and one below the last data row	Table legend is presented at the top of the table. Table legend includes the number (e.g. Table 1), but does not accurately describe the table; or does not include the table number; or is placed below the table itself	No table legend; No horizontal lines breaking the header from the data and or multiple vertical lines present	
<b>Accuracy</b>				
<b>Experimental Design</b>				
	Appropriate experimental design developed and implemented to address all research question and hypotheses.	Appropriate experimental design, but may be incomplete or unable to test all hypotheses.	Experimental design not clear; Design cannot test hypotheses	
	Dependent, independent, and auxiliary variables are identified and described fully.	Variables are appropriate, but may be incomplete, or not clearly identified.	Variables inappropriate or not identified.	
	Need for appropriate controls considered and explicitly identified.	Some evidence that appropriate controls were considered	No evidence of consideration of controls	
<b>Accuracy</b>				
<b>Quantitative Analysis</b>				
	Metric or SI units are used correctly and consistently throughout the report.	Metric or SI units generally used correctly in most of report.	Units are rarely used or are generally incorrect or reported in non-metric or SI units.	
	Appropriate descriptive and hypothesis testing statistics used. Calculations clearly laid out and are correct.	Appropriate analysis, but calculations contain 1-2 errors.	Analysis not reported or is unclear or there are more than 2 errors.	
<b>Organization and Writing Style</b>				
<b>Writing Mechanics</b>				
	Answers will contain no spelling errors; essay conforms to a logical sequence of ideas, from exposition through development of main idea(s) to conclusion; ideas are expressed in complete sentences.	Answers will contain few spelling errors; essay conforms to a logical sequence of ideas with introduction, some from development of main idea, and conclusion; ideas are expressed in complete sentences, although minor punctuation errors are noted	Answers contain spelling errors throughout; essay is unstructured, lacks defined exposition and conclusion, ideas juxtaposed throughout; ideas are expressed in run-on or fragmented sentences. Errors in grammar and sentence structure interfere with student's ability to communicate.	
<b>Total (out of 100)</b>				