

Major Lab Report Grading Rubric: Bio 1C, Plant Biology and Ecological Principles

Value scale	Writing and grammar/ organization	Introduction and statement of problem w/significance	Specific Questions and hypotheses	Materials and Methods and Issues	Results and Analyses	Discussion/ conclusions
5	Uses technical and scientific terminology. Well organized, easy to follow. No or very few grammar and spelling errors.	<p>Background information places project into a broader context, and makes linkages to that context.</p> <p>Includes a clear statement of the 'problem' or 'question' addressed, and ties that problem/question to the broader context.</p> <p>Includes a clear statement of the significance (importance) of the work –within the broader context, <i>and</i> specific to this study. Makes a compelling argument for the study.</p>	Clearly articulates the specific questions addressed, and poses clear, narrowly defined hypotheses linked to the data (yes/no hypotheses, rather than broad 'why')	<p>Clear list of materials used for sampling</p> <p>Methods are clearly explained and diagramed so that someone else could duplicate the work</p> <p>Includes a thorough discussion of sampling issues and possible errors and assumptions, and how they were overcome</p>	<p>Results are clearly stated and linked to the question and hypotheses. What patterns are seen?</p> <p>Analyses are clear, and supported by statistics/graphs/data</p> <p>Results clearly displayed in graphs, tables etc. Graphs and tables are clearly labeled and appropriate for the data being displayed</p>	Analyses and results clearly supported, explained and linked to the questions/hypotheses, and to the broader context of the problem stated in the introduction. What do the data say/ mean? Conclusion includes some questions for future research/direction, and a strong message
4	Uses mostly technical and scientific terminology. Organized, relatively easy to follow. Few grammar and spelling errors.	<p>Background information places project into a broader context, and attempts to makes linkages to that context, but they are somewhat weak</p> <p>Includes a statement of the 'problem' or 'question' addressed, but does not effectively tie the problem/question to the broader context.</p> <p>Includes a statement of the significance (importance) of the work but does not make a strong argument for the study (seems like a reasonable study, but difficult to assess value).</p>	Articulates the specific questions addressed, but they are somewhat broad. The hypotheses are clear and linked to the questions and the data, but are too broad (yes/no, but also some 'how' and 'why')	<p>List of materials used for sampling</p> <p>Methods are explained and diagramed so that someone else could duplicate the work, although they may need clarification</p> <p>Includes some discussion of sampling issues and possible errors and assumptions, and how they were overcome</p>	<p>Results are stated and mostly linked to the question and hypotheses.</p> <p>Analyses are present, and mostly supported by statistics/graphs/data</p> <p>Results displayed in graphs, tables etc. Graphs and tables are labeled and appropriate for the data being displayed, but some detail is lacking.</p>	Analyses and results are stated but not strongly supported. They are linked to the questions/hypotheses, but not to the broader context of the study very well. The conclusion mentions future directions, but does not articulate some specific questions/directions/studies.

3	<p>Uses quite a bit of non-technical and non-scientific language (essay style). Organization is present but not clear, and difficult to follow. Numerous grammar and spelling errors.</p>	<p>Background information is present, but either focuses only on a broad subject or this specific study – very little effort is made to link the study to a broader context.</p> <p>Includes a statement of the ‘problem’ or ‘question’ addressed, but it is not very clear.</p> <p>Includes a weak statement of the significance (importance) of the work but makes a weak argument for the study. I’m not convinced.</p>	<p>Articulates the specific questions addressed, but they are somewhat broad. The hypotheses are vague and weakly linked to the questions and the data.</p>	<p>Partial (unclear) list of materials used for sampling</p> <p>Methods are only partially explained and diagramed: I would need a lot of help to do this</p> <p>Includes some discussion of sampling issues and possible errors and assumptions, but I’m not convinced they were overcome or taken into consideration during the analyses.</p>	<p>Results are stated but not really linked to the question and hypotheses.</p> <p>A bunch of graphs are attached without adequate description or analyses.</p> <p>Results displayed in graphs, tables etc. Graphs and tables are not well labeled and are difficult to read and interpret.</p>	
2	<p>Uses very little technical and scientific terminology. Organization lacking. Grammar and spelling errors make the paper difficult to understand and/or follow.</p>					