Lab Report Grading

The points are cumulative and total so that the complete lab report is worth 18 points.

Header

___/ ¼ title
___/ ¼ author with partners
___/ ¼ date
___/ ¼ organization (DACC PHYS____)

____/ 1 Total

Table of Contents (APA Style)

___/ ½ headings
___/ ½ corresponding pages numbers
___/ ½ list of tables and figures
___/ ½ indicates contents of appendix

____/ 2 Total

Abstract

___/ ½ topic & purpose
___/ ½ statement of expected results
___/ ½ process of obtaining results (**brief** include only information on the variables collected and analysis techniques NOT lab setup or apparatus)
___/ ½ statement of results with percent error

____/ 2 Total

Introduction & Discussion

CT ___/ ½ statement of purpose identifies & summarizes the problem
CT___/ ½ why is this lab & topic important
___/ ½ complete historical discussion with citation
___/ ½ expanded experiment detail
___/ 1 derive the equation used from scratch
CT___/ ½ clarify variables
___/ ½ reference to sample calculations
___/ ½ elaborate on concepts and define terminology
CT___/ ½ statement of assumptions

____/ 5 Total

Procedure

___/ ½ give a list of materials with brand names
___/ ½ detailed procedure with diagram
CT___/ ½ detailed description of troubleshooting used
CT___/ ½ detailed analysis method

____/ 2 Total

Data & Results

___/ ½ reference to objective
___/ ½ description of data table & graphs
CT___/ 1 trends or patterns illustrated by data

____/ 2 Total

Summary

___/ ½ brief reference to purpose & procedure
CT___/ ½ list results & accurate conclusions
___/ ½ statement of % error
CT___/ ½ sources of error and their effects on results

____/ 2 Total

Appendix

___/ ¼ reference list
___/ ¼ calculation page
___/ ¼ propagation of uncertainty
___/ ¼ handwritten data

____/ 1 Total

Calculation Page

___/ ¼ states and describes equations used
CT___/ ¼ provides qualification for equation
___/ ¼ defines variables
___/ ¼ provides example calculations

____/ 1 Total

Score: _____/ 18 total points.

Critical Thinking [Separate Score]

___/ determines when additional information is needed
___/ explains reasons for assumptions
___/ evaluates credibility of lab
___/ identifies salient arguments: pros & cons
___/ thoughtfully evaluates alternative pts of view
___/ draws warrantee conclusions
___/ fair-mindedly follows evidence
___/10 number of CT credited above.

____/ 17 Critical Thinking Score

Additional points can be deducted for:

incomplete work
lack of accuracy
errors in calculation
lack of reference
failure to clean lab area
failure to take an active role in the experiment
mislocation of section material
horse play or safety violations (results in zeros)
lack of proofing
lack of trials
anything else that suits my fancy
lack of professionalism
improper format
errors in interpretation
misconceptions