

Exhibit 8.4–2. Grading Rubric for Lab Reports

Team: _____ Experiment: _____ Evaluator: _____ Date: _____

Category	Score (S) = 4	S = 3	S = 2	S = 1	w	S	wS
Abstract	Clear, concise, accurate abstract of experiment and results	Clear and concise but incomplete abstract of experiment and results	Unclear or incomplete or too long	Inaccurate or illegible	5		
Background	Relevant background clearly summarized in students' own words; appropriate sources cited correctly	Background reasonably summarized in students' own words; appropriate sources mostly cited correctly	Inadequate but original background summary or questionable sources or incorrect citations	Illegible or directly copied background summary and/or few or no citations	10		
Experimental hypotheses	Hypotheses clearly stated and logically justified	Hypotheses clearly stated but inadequately justified	Hypotheses stated but not justified	No hypotheses stated	5		
Experimental setup and procedure	Setup and procedure clearly and accurately described	Setup and procedure adequately described	Setup and procedure poorly described	Inaccurate or unreadable description	10		
Data	Professional looking and accurate presentation of data in labeled tables and graphs	Accurate presentation of data in labeled tables and graphs	Accurate presentation of data in written form with no tables or graphs	Illegible presentation of data	10		
Data analysis	Data analysis (including error analysis) performed correctly	Data analysis with a few minor mistakes	Data analysis with many or substantial errors	Data analysis incorrect or illegible	20		

Data interpretation	All relevant scientific concepts correctly applied	Most relevant scientific concepts correctly applied	Limited application of relevant scientific concepts	No application of relevant concepts	15		
Conclusions	Everything learned accurately stated; hypotheses convincingly supported or rejected	Everything learned accurately summarized; hypotheses inadequately addressed	Conclusions not clear from results	No conclusions included in report	5		
Summary	Experiment, data analyses and interpretation, and conclusions completely and clearly described	Experiment, data analyses and interpretation, and conclusions described with minor omissions	Important information poorly described or omitted	No summary included in report	5		
Writing	Correct grammar and syntax; clear and concise style	Correct grammar and syntax; awkward or unclear writing	Numerous mistakes in grammar and syntax	Almost unreadable	10		
Appearance/organization	Typed and well organized (headings and subheadings)	Neatly handwritten and well organized	Neatly written or typed but poorly organized	Sloppy	5		
SUM					100		

$$\text{Report Grade} : 20 + \frac{1}{5} \sum_i (w_i S_i) = (\text{maximum} = 100, \text{minimum} = 40)$$