

Writing and Organization (2 pts)	Report starts with a clear description of the scientific goal/question the experiment addresses			
	Report recapitulates the main experimental conclusions in the context of this goal at or near the end of the report.			
	Effective Summary < 3 pages: Report provides sufficient details on the experimental setup, what reported values represent, and how they were calculated--without providing unnecessary details (e.g., intermediate results, equations repeated with each of the values used plugged in). Think of it as a work report to your boss--they need enough detail to know what you did, but not all the details or tangents along the way.			
	Report is well organized into separate paragraphs that provide an effective structure for following the train of thought.			
	Equations and symbols defined, and relevant background physics introduced			
	Clarity: Report is clearly worded and proofread, without distracting typos and/or incomplete sentences.			
Procedure & Analysis (3 pts)	Description of experimental setup and steps taken is sufficient for someone with knowledge of the equipment to replicate the results.			
	Clear description of how possible sources of error were identified and evaluated. The experimental procedure was chosen to randomize dominant systematic sources of error as much as possible.			
	The calculations required to connect the data collected to the physical quantities of interest were performed correctly..			
	Procedure minimizes measurement uncertainties and adequately controls for confounding factors.			
Figures (1 pt)	Figures include axes labels, units, figure labels and captions.			
	Report includes instructive pictures of the experimental setup, and relevant data plots as specific to the lab in question.			
Error Estimates (2 pts)	Report provides summary experimental estimates in the form $\pm \delta x$ and/or plots showing point estimates with error bars. Document calculates values correctly, and explicitly states how both the final value was estimated (single measurement? mean over N trials?) and what the uncertainty represents (standard deviation over N trials? SEM from N trials? differences near the maximum?).			
	Careful (and quantitative where appropriate) analysis of which were the dominant sources of error. Clear and accurate discussion of errors (random vs systematic, estimated vs empirically derived, etc.)			
	Experiment performed repeated trials to obtain empirical estimates of their measurement uncertainties.			
	Errors are reasonable in magnitude for the particular experiment, and consistent with collected data.			
	Significant deficiencies in data & error estimates are reflected on & plausible explanations are identified.			
Results & Interpretation (2 pts)	Clear summary plot systematically varying one quantity on the x-axis over ≥ 5 values (except Module 1).			
	Confidence in any observed trends or model fits is adequately discussed in the context of the estimated error bars and/or fit statistics.			
	Clear and logical conclusions are drawn from the results in the context of the original question posed, and report reflects on future experimental changes that would reduce the dominant errors identified.			
Lateness	(-0.5) < 5 hours late	(-1.0) < 24 hours late	(-1.5) < 48 hours late	(-2.0) < 72 hours late