

Formal report grading rubric – Electronics and Instrumentation

Physics 181, Fall 2017

	<i>The C report is solid.</i>	<i>The B report is strong.</i>	<i>The A report excels.</i>	<i>The D report is deficient.</i>
Physics The physical ideas are correct. The report demonstrates depth and complexity of thought, with enhanced discovery.	The majority of the essential physical ideas are addressed. The report conveys some understanding on how the experiment explores the physical concepts. The analysis correctly addresses the main questions posed in the lab manual.	The essential physical ideas are addressed. The report shows a solid understanding of the how experimental measurements and results connect with physical concepts. The analysis correctly addresses the questions posed in the lab manual, with a depth and complexity expected for an upper division student.	The essential physical ideas are unfailingly correct. The report clearly shows a thorough understanding of how the experiment explores the physical concepts, including its limitations. The analysis addresses the physical questions that the <i>experiment</i> brings up, beyond what's expected from the manual. The analysis has depth and complexity, and incorporates ideas beyond this specific experiment.	Some of the essential physical ideas are omitted. The report shows little understanding of the experimental design and how the measurements relate to the physical concepts. The analysis doesn't address the main questions, or addresses them incorrectly.
Structure, support and focus The report presents a structured and well-reasoned argument. Evidence, primarily from the experiment, is used as appropriate support. The report has focus.	The report generally follows the expected structure (intro, theory, etc). Claims are supported with experimental evidence and physical ideas. The abstract attempts to address the main points.	The report correctly follows the expected structure, with no missing or misplaced ideas. The overall report is coherent and presents ideas in a logical flow. Claims are supported with appropriate and sufficient experimental evidence. The evidence is well explained, with specific descriptions. A discussion of discrepancies is present. The abstract addresses the main points.	The report has a coherent structure, and has a strongly defined emphasis, starting with the title. The introduction has a purpose, paragraphs are well-developed, and transitions are graceful. Claims are supported to the right depth, with detailed evidence from the experiment and reasoned arguments. A convincing discussion of discrepancies is presented. The abstract is concise and clear.	The report attempts to follow the overall expected structure, but ideas are misplaced and there are distracting breaks in the logical presentation of ideas. Points are poorly or incorrectly supported, with little convincing evidence or argument. The abstract is not an abstract.
Equations, figures and references The report communicates ideas using the conventions (equations, figures, tables, and references) used in physics.	The report uses equations, figures, and tables. A token reference is presented.	The report uses equations, figures, and tables appropriately. The report discriminates between essential and less-important equations. Equations, figures and tables are satisfactorily formatted and explained. References go beyond the course text, with several key ideas properly referenced.	The report smoothly incorporates appropriate equations, figures, and tables into the text. Equations, figures, and tables are effectively formatted and explained. The report discriminates between what's essential and what isn't. The majority of the key ideas are referenced appropriately.	The report uses equations, figures, and tables, but without discrimination (way too much) or thought (not appropriate). Equations, figures, and tables are poorly or incorrectly formatted and explained. References are inappropriate.
Language, grammar, spelling, formatting The report follows standard expectations of the English language and discipline-specific norms.	Language may be too simple or overly complex. Tone is inappropriate enough that it distracts from the report. The report uses generally correct grammar, punctuation, formatting, and spelling. Several minor, or a few major, errors	Language is clear and effective, but may contain some awkwardness or be overly complex at times. Tone is appropriate most of the time. The report uses correct grammar, punctuation, formatting, and spelling. Errors are few and minor.	Language is clear and concise. The report maintains a consistent and appropriate tone. No discernable grammar, spelling or formatting errors.	Tone is inappropriate most of the time. Several easily identifiable major errors in grammar, spelling, or formatting. Errors are enough that they detract from the effectiveness of the report.

The F performance is seriously deficient. The report does not demonstrate an understanding of the essential physical ideas. There is no defined structure or development of ideas. Equations, figures, or tables, are not presented or are presented without discussion. Grammar, spelling, and formatting errors make it difficult to read. References are absent.