Laboratory Grading Guidelines

An “A” laboratory paper is a superior intellectual work that clearly, accurately, and concisely conveys all ideas. The author uses external resources to investigate fundamental principles relevant to the experiment, performs analysis beyond that required in the basic laboratory guidelines, and demonstrates extraordinary comprehension. The author arranges the discussion for logical development and strategic emphasis (The report should tell a story). The author carefully constructs graphs and plots that distill relevant experimental data using valid statistical techniques for analysis. The author draws logical conclusions supported by data and provides logical and viable recommendations. The author carefully analyzes the data, considers supporting material, and anticipates the questions of the audience.

In an “A” report, the writer carefully revises the rough draft, removing awkward phrases and imprecisions. The author combines, subordinates, and condenses the sentences to improve precision and economy. The writer proof reads the paper carefully to correct typographical errors, spelling, punctuation, accuracy of references, and ensures the accuracy and complete labeling of graphically reduced data. No paper can be excellent if it is carelessly written, regardless of the analysis. Careless, imprecise, and unpolished writing reflects a lack of thoroughness unacceptable to a professional engineer.

A “B” paper has some of the qualities of an “A” paper, but falls short of excellence in substance or style. The writer has a very good comprehension of the material, but does not probe it thoroughly. Not fully aware of the complexities or subtleties, the author leaves some aspects insufficiently developed or unexamined.

Often a “B” paper has an organizational flaw or important material does not receive needed attention. Usually the sequence of ideas is not in the most logical order. A “B” paper is often insufficiently proofread: minor, careless errors persist (typos, a misspelled word) that detract from the writing. Often, the author has not fully reworked sentences for clarity and economy.

A “C” report meets the minimum requirements of the assignment in a satisfactory manner. The author demonstrates some comprehension of the material, but often has not focused or fully developed the analysis. The author discusses the supporting ideas on a general level with inadequate illustration or insufficient detail. The analysis is usually weak and the organization is rather mechanical. A “C” paper is often a description of an experiment and not a thoughtful discussion. The author makes only the expected surface observations.

“C” papers nearly always suffer from developmental weaknesses. The recurrence of careless minor errors becomes overly distracting. Awkward sentence structures, misspelled words, improper analysis, unsupported conclusions, and untenable recommendations are often present.

A “D” paper can result from an average comprehension of material undermined by seriously flawed writing or from a major misunderstanding of the material. Often, the writer does not demonstrate the fundamental principles of technical writing and/or analysis. The paper includes a large number of problems including: missing sections, poor organization (arbitrary or random), undefined thesis, digressions and irrelevancies, weak logic, poor transitions between ideas, the presence of a combination of numerous typos, misspelled words, dangling clauses, faulty punctuation, and other flaws that show the paper to be unproofed.

An “F” denotes effort that is unacceptable as college-level work and often includes only a summary rather than an informed, insightful, well-supported analysis.