



ADVANCED PLACEMENT PHYSICS

LA9903A : Lab Journals

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OVERVIEW

Documentation of your process is absolutely essential in scientific research. A critical portion of your project (and hence, your grade) will revolve about the maintenance of a lab journal. Failure to maintain an adequate journal is equivalent to failure of the project and will graded as such.

FORM

The School will provide you with a hardbound quadrille laboratory journal (one per group). All of your work is to be documented in this journal. The journal stays in the New Physics Lab. If you produce loose sheets of paper (for example, a printed graph), they should be taped or stapled into the journal.

FORMAT

The lab journal is intended to help you organize and marshal your intellectual resources. As such, I feel it would be counterproductive to impose a particular format or manner. However, to ensure that you make full use of this resource, I will insist on the following:

- ∞ Dating: Every entry in the journal must include a date.
- ∞ Organization: Each new entry must be clearly recognizable as such, and distinct from surrounding entries. (It's acceptable to start each entry on its own page.)
- ∞ Legibility: Although you might work in shorthand, it should be reasonably easy to decipher and decode the entries.
- ∞ Sequentiality: You must begin on the first page and work straight through. Do not skip pages; do not remove pages (or other contents) from the lab. Things you no longer support should have a line drawn through lightly, but not be obliterated.

Everything you do should be reflected in the journal. If you find a good website, write its URL in the journal (or better, print the homepage and paste it in). If something interesting appears in the newspaper, clip it and paste it. If you discuss the project with myself, Mr. Sabol, or anyone else, record the essence of the conversation. The journal should be a scrapbook and a memoir.

STORAGE

I will provide a place to keep your lab journals in the New Physics Lab. Journals are not to be taken from the lab except for specific, and short-term, purposes. You must get explicit permission from me to take the journal out of the lab and you must sign it out and back in. The primary purpose is to allow the group to move forward even when a member is absent; the work of the group is available to all. You may wish to buy a folder in which you can temporarily store work, clippings, etc., accumulated outside of lab time.

JOURNAL CHECKS

Several during the project, at random and unannounced intervals, I will pull the lab journals off the shelf and check your progress. These checks count for more than 20% of your final total.

MISCELLANY

- Every week, the journal should include an entry summarizing progress from the past week and listing goals for the coming week.
- A good journal will include an extensive list of interesting questions, both pragmatic and theoretical, that arise as the work proceeds. A better journal will also, eventually, include answers.
- Believe it or not, the journal is meant as a resource for you, not me. Thus, hurriedly penciling in things just prior to a lab check indicates that you are not using the journal for its proper purpose (to wit, to record and organize your thinking). As such, I will treat indications that you have in fact simply filled pages as evidence of cheating and an attempt to mislead me, and will take appropriate action.