

Lab Notebook Policy

Chem1BL, General Chemistry II Laboratory

Lab notebooks are the physical records of work done in the laboratory that scientists keep. They keep an organized repository of procedures done and data collected, serve as invaluable resources when preparing papers or presentations on results and provide an indisputable record of what was done and when. It is the responsibility of every scientist in any laboratory environment to keep a neat, up-to-date notebook so that their work is recorded and can be referenced by themselves and by future scientists.

BASIC GUIDELINES

Always use a carbon or carbonless copy lab notebook. This will allow you to turn in your original pages as part of your Post-Lab Assignments while keeping the copies bound in your notebook for your reference and future grading.

Always use permanent pen, *never pencil*.

Use the first page of your lab notebook to keep a Table of Contents that can be added to experiments as they are completed. This should include the experiment title and the page number in your lab notebook where that experiment begins.

Write neatly and legibly. Use a single line to strike through any errors. *Never scribble out or erase.*

Any extra blank space left on a page can be crossed out with a single "X" made in permanent pen.

Use clear, concise descriptions. It should be possible for another Chem1BL student to follow the procedures written in your lab notebook without needing help and be able to replicate your exact results.

Sign the bottom of every page as a statement that the work included is truly your own.

Each experiment should include the following sections:

TITLE: This should be written at the top of the first and *every* following page pertaining to the experiment. It may be the same as the title in your lab manual.

PURPOSE: This should be a brief one or two sentence description of the goal of the experiment—what information you intend to determine or calculate.

PROCEDURE: This is a stepwise description of what you did in lab, including all techniques, equipment, and procedures used. For experiments that have the procedure already written in the lab manual, you may write “Refer to pages # from the Chem1BL manual” in lieu of rewriting the procedure.

DATA: This is where all of your data tables, example calculations, and/or graphs should be located. Label everything appropriately (i.e., “Table 1: Concentration versus Absorbance of methyl blue” or “Equation 3” for sample calculations). Should you need to include computer-generated information, permanently attach the printed pages to the pages of your notebook, either by stapling, taping, or gluing. While the graphs should be numbered in their titles (i.e., “Graph 2: Beer’s Law Trial 1”), the pages do not need to be. For repeated calculations, it is only necessary to show one sample calculation.

DISCUSSION: This should be a prose-based interpretation of your data including any possible errors that may have affected your results. It should include many references to your data (i.e., “Fig. 2”) to explain each and why you drew the conclusions you did.

CONCLUSION: This should be a brief one or two sentence description of your results. It should address the items that you stated in your purpose.

POST-LAB QUESTIONS: Though not included in a professional notebook, you will still be required to answer the post-lab questions written at the end of every experiment in your lab manual. Include all work, calculations, research, and necessary computer print-outs as directed.

The original pages from your notebook will be turned as your post-lab assignment at the start of the next experiment; it is therefore your responsibility to ensure that it is *always* up to date.

Note: Lab notebook keeping is an essential skill that will be assumed in your possession as you continue in scientific courses, research, or professional laboratories. It protects yourself by providing a verifiable record of your work as well as creates a physical record of methods tried and tested for others to follow. It is an invaluable thing to learn and to always practice!