Lab Notebook Guidelines

1) Number the pages of your notebook (if they aren’t already numbered).
   - it’s a good idea to record your lab exercises only on the front of each page,
     leaving the back side of each page for notes or review questions

2) If your notebook lacks a page(s) for the Table of Contents, leave a blank page or two at the
   beginning of your notebook to build a Table of Contents as you go along.

3) Include the following for each exercise entered in your notebook:

   a) Date
      - the dates you perform and analyze each procedure should *always* be clear
      - if your exercise covers more than one lab session, always be sure to indicate the
        new date

   b) Title of experiment or exercise
      - e.g. “Gel Filtration Chromatography”
      - indicate the corresponding exercise in your lab manual

   c) Purpose or Objective
      - State what you are trying to find out or accomplish in one sentence.
        - e.g., “Separate orange dye from blue dextran molecules.”
        - do NOT state “To learn how to…”
      - *think in terms of what the exercise you are doing will specifically accomplish*

   d) Procedures
      - outline the procedures you performed (past tense), ideally as you do them
        - it’s *not* OK to simply say “see lab manual exercise A”, you need to write it out, preferably in bullet or outline form
        - if you are repeating a procedure exactly as you have done previously
          you can put “see page X” of your notebook instead of rewriting it all
      - be sure to clearly indicate all relevant details (amounts, temperatures,
        times, etc.) that would be necessary to repeat the procedure
      - *any deviations, changes or mistakes should be reflected your procedures since*
        *they are a record of what you actually did, not what you were supposed to do*
e) Results (or observations)

- record the results or observations of your experiment in an appropriate form
  - e.g., a color drawing or photograph, table, etc.
  - think of your results as a visual record of what you observed as well as any measurements you made
- be sure to sufficiently label each result so that anyone else in the class (or you) would know what they are looking at

f) Conclusions

- briefly summarize what you conclude from your results (i.e., what they mean) as they pertain to the purpose of the exercise (usually can be a sentence or two)
- this is appropriate only at the completion of an experiment or exercise, even if it took multiple days to complete
- e.g., “Based on these results…”
- if something went wrong and you weren’t successful in accomplishing your purpose or objective, briefly address that and speculate as to why

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Also, be sure to keep in mind the following:

- Someone else (or yourself at some point in the future) should be able to repeat your experiments using only the information in your notebook. (think of this when you are unsure as to what to put in your notebook)
- Be neat and organized, your entries should be legible and organized in a logical, consistent manner.
- Be brief and streamline your entries as much as possible (abbreviations are OK!).
- Don’t erase any mistakes, simply cross them out, that information may turn out to be important at some point.

The quality of your notebook will impact your point totals, and hence your grade:

- the overall quality of your notebook will count for 25 possible points
- the other 25 points will be earned provided you have a complete notebook entry for each exercise you are required to enter in your notebook