

Examples of Orientation/Tutorial Handouts

How to Keep a Lab Notebook

(modified from <http://www.colorado.edu/mcdb/MCDB3140/notebooks.html>)

- Handwriting must be legible.
- All notes should be written in pen
- Errors should be crossed through with a single line, not erased or obliterated.
- Everything you do in the laboratory should be recorded in your lab notebooks, including notes, drawings, data, speculations, etc. Everything from your initial strategy through planning, execution and interpretation and should be in your notebook.
- Keep in mind that reports and presentations will be prepared from the notebook. You should have much more information recorded in your notebook than you can or should put on a poster or into a presentation.
- It's important to note that an experiment must be thoroughly documented in your notebook if it is going to be presented in a talk, poster, paper, etc. If it is not described thoroughly and legibly in your notebook, it doesn't count as having been done.
- Pages for each experiment should include:
 - Title of experiment and date.
 - The Hypothesis and/or Objective(s) of the experiment: what you are trying to do and why you are trying to do it.
 - The Protocol for the experiment.
 - Any deviations from your written procedure. This includes changes both intentional and accidental.
 - Observations: everything that happens during your experiment that may have a bearing on the outcome or interpretation of the experiment (this includes color, precipitate, time, temperature, etc).
 - Data: raw and calculated. Use complete sentences, tables and graphs where appropriate. Show sample calculations with steps and units.
 - Discussion: Interpret your results. Refer back to your predictions. Draw conclusions about experiment. Make suggestions for further experiments or refinements to the procedure.

Checklist for Students to Ensure Productivity

(Adapted from the Council of Graduate Schools' Supervisory Practice Handbook)

- Have you tried to plan your work systematically?
- Have you identified the major difficulties?
- Do you understand the relevant references?
- Are your records in good order and could you answer a question on something you did two weeks ago?
- Have you drafted the first version of any portion of the work that has been completed?
- Do other people find your written work difficult to understand?
- Are there any tables, figures, or other matters that could usefully be prepared at an early stage?
- Do those individuals in the department/laboratory you are working in consider you a productive individual/member of the research team?