Writing Lab Reports

Format

Font: use 12 point Times New Roman typeface

Margins: 1 inch all around, with header ½ inch from top

Spacing: double space your entire document including title page and reference page

Cover page: optional; ask your Professor or lab TA if a cover page should be included

Include the following information double spaced on either your cover page (centered) or on your first page in the top left corner before your title
- Title of your experiment (omit if you’re not using a cover page)
- Your name
- Your lab partners names
- Date the experiment was performed
- Course number, section,
- Your instructor or lab TA’s name

Introduction

Your introduction should address:
- What experiment was performed
- Objectives of the experiment
- Questions to be answered
- Hypotheses
- Importance of the experiment
- Background information necessary to understand the experiment

Procedure or Methods

This section is written as a description of what you did, not as a set of instructions

Explain to the reader:
- The steps you took to perform the experiment
- The equipment used, and how it was used to perform each step
- When and where the experiment took place (more important in field studies)

Include graphics of more complex setups if helpful or necessary

Include sufficient detail so another person with similar background knowledge could repeat your experiment without overwhelming the reader
Results

Present raw data organized in tables, figures, graphs, etc.
- Tables & figures should be self-explanatory, with labeled columns, rows, axes, legends, etc.
- Number tables and figures separately and give descriptive titles
- Use numbering to refer to tables and figures in text

Explain important data in words without interpretations or implications

Example: Figure 1 shows the population increased at a steady rate of 7% until 1996 when it began decreasing by an average of 2% over 10 years.

- DO NOT mention why the population increased then decreased, what may have caused the shift, or what this means in the context of your experiment

Sample Calculations are included if necessary

Discussion

Restate your results and provide interpretations and implications of your data

Include error analysis

Explain why you accept, reject, or reformulated your hypothesis

Provide suggestions for improving the experiment or follow-up experiments

Speculation about the experiment is included in the discussion if applicable

Revisit objectives outlined in the introduction to determine if all questions were answered, and if your experiment was a success

Conclusion

Usually your conclusion will NOT be a separate section, but rather come at the end of your Discussion section
- If you combined the results and discussion sections of your lab report, include a separate, longer conclusion section

One or two sentences that describe your results within the context of the experimental objectives