

Outlining Worksheet

(Created by CLEAR Instructor: Dynette Reynolds)
dynette.reynolds@utah.edu

This handout will help you outline your lab report. Not all elements listed here will be pertinent to every project; they are included in case you want to use this form for other classes. You can find a sample lab report on Dr. Cindy Furse's website:

http://www.ece.utah.edu/~cfurse/CLEAR/writing/index.htm#_ECE_Writing_Resources_1.

Writing tips: Don't talk about what the report does, except in the Abstract. Talk directly about the experiment itself. ("The purpose of this experiment was...", NOT "This report presents the results of a lab experiment that was designed to...")

I. Abstract

(Purpose of an Abstract: To briefly summarize your entire paper, including your findings and conclusions, in 200 words or less. Also, you should write the Abstract AFTER writing the rest of the paper.)

- A. General statement of problem and/or project
- B. Summary of findings
- C. How those findings were reached
- D. Importance of findings

II. Introduction

(Purpose of an Introduction: to give background on the project.)

- A. General statement about problem(s) to be solved or question(s) to be answered
- B. Importance or purpose/goal(s) of this experiment
- C. Scientific principles governing this project
- D. Who else has tried this and their results (review of literature)
- E. How your project is different

III. Methods

(Purpose of a Methods section: to describe the procedures used in the experiment in such a way that the reader could duplicate the experiment.)

- A. Overall description of procedure (in one paragraph)
- B. Equipment and/or materials used
- C. Assumptions made and/or equations used
- D. Describe each step in detail
 - 1. Why was this step necessary?
 - 2. What data was obtained?
 - 3. Any anomalies or problems encountered? Why?

IV. Results and Discussion

(Purpose of Results section: to analyze and interpret your findings)

- A. General statement regarding success or failure of experiment (in one paragraph)

- B. Interpretation and discussion of data illustrated in tables or figures
 - 1. How was the illustration created? Which calculations were used?
 - 2. What is the most important data in this illustration? Why?
 - 3. What does the information *mean*?
 - 4. Possible errors or bias?

V. Conclusion

(Purpose of Conclusion section: to recap most important results and determine future action to be taken)

- A. Re-state purpose of project and whether it was successful
- B. Brief statement about most important results
 - 1. Details about results (with recaps of most important data)
- F. Greater significance of project
- G. Questions that remain unanswered
- H. Recommendations for future action