

Outlining Worksheet

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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