



JOINT INSTITUTE  
交大密西根学院

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PHYSICS LABORATORY  
(VP141/VP241)

## LAB REPORT REQUIREMENTS

# Format

All laboratory reports must be typed (L<sup>A</sup>T<sub>E</sub>X is recommended but not compulsory) and printed, with all pages stapled together. For exercises with on-site reports you will be given a report form to be filled and submitted to the session instructor at the end of the lab session.

## Contents

The report should include the following items

1. *Title Page*

This page should show only the students name, ID number, group, the name and the number of the experiment, and the names of the students partners (if any).

2. Theoretical Background

You should state the purpose of the experiment, briefly summarize the idea of the measurement and quote the laws of physics and equations that will be used to obtain the final result.

3. Apparatus

List the equipment used to do the experiment.

4. Procedure

Describe how the experiment was carried out.

5. Calculations and Results

Provide one sample calculation to show the use of the equations. Present your results in a form that is can be easily followed by the grader. Use graphs and diagrams whenever required. The results must be presented with the pertinent errors (see the next point).

6. Conclusions and Discussion

Relate the results of your experiment to the stated objective. Compare with reference values (remember to quote the source). Give a brief discussion for the possible origins of discrepancies. Suggest improvements to the experiment.

7. *Appendix A* – Measurement Uncertainty Analysis

Give the formulas for uncertainties of physical quantities that you find, and find their values based on the measurement data recorded in the lab.

8. *Appendix B* – Data Sheet

Attach the **original data sheet** for the experiment that **has been signed** by your instructor.

## Submission

The report must be submitted for grading within a week from the lab session (except for exercises with on-site reports). Please allow enough time to write and proofread your report. For details of the submission procedure, please consult the course syllabus.

After your report is graded, you are strongly encouraged to visit the instructor (within one week after the report grades are released) during his or her office hours to discuss it.