

Lab Report Format

The lab report is a *concise* document summarizing the results of your lab work. It must be typed and include the following:

1. **Title Page** – Should include the Date, Course Name, Lab Number and TITLE, Partner Names and ECE Box Numbers.
2. **Table of Contents** – Required if multiple experiments are presented in the same report. Should include page numbers and references to any appendices.
3. **Abstract** – A brief statement indicating the overall purpose of the lab including what is being investigated, the specific results of the experiments, and the significance of these results.
4. **Equipment** – A list of the equipment used, including model numbers and bench number so experiments can be duplicated, if necessary.
5. **Experiment Introduction** – A concise statement describing the scope of the experiment and what is included in this section of the report.
6. **Theoretical Basis** – A statement explaining the physical aspects of the system being investigated including key mathematical expressions that govern its behavior.
7. **Circuit Description** – Detailed schematics including appropriate symbols, part numbers, reference designators (R_1 , C_2 , etc.), and measurement points (V_1 , I_2 , etc.) referred to in the report. All figures and equations must be labeled and numbered appropriately.
8. **Experimental Results** – Tables, graphs and oscillograms. Data should be clearly presented. Be sure to label axes indicating appropriate scales and units. Use a digital camera to document lab set-ups or oscilloscope waveforms, if necessary. All pictures MUST BE TIME AND DATE stamped to verify authenticity.
NOTE: Simulated waveforms WILL NOT be accepted in place of actual oscilloscope measurements.
9. **Comparison to Theory & Simulation** – Compare your experimental results to theory and simulation. Point out similarities and differences.
10. **Observations and Conclusions** – Convey the meaning of the experiment to the reader. Provide reasonable explanations for your results or where further work would be necessary to resolve any discrepancies.
11. **Overall Summary** – A brief summary of the entire lab.
12. **Appendices** – Information that does not fit well in the body of the report should be relegated to the appendices including component specification sheets, hand calculations, simulations and copies of lab notebook pages, etc.

Repeat for each individual experiment, if the report contains more than one.