ET 332b
Electromagnetic Principles and Devices
Laboratory Experiment Format

You will perform several experiments on different topics during the course of the semester. The following information outlines the format used to document the experiment results and the procedures used to find the results. Type all experiment reports submitted this semester. **Use this format on Experiments 3, 4, and 5.**

The first page of every experiment report will be a cover page that will include the following items:

- Experiment number
- Experiment title
- Course number
- Student name.

Center these items in the middle of the page. An example cover page is attached. This template is available from the course website.

The following section describes the body of the experiment report. Number the pages in the body of the report at the bottom center. Do not number the first page of the report. This page displays the title information described above.

The body of the experiment has four sections:

1.) Objective
2.) Procedure
3.) Data and discussion of results
4.) Conclusion.

In the objective, you will explain the purpose for doing the experiment. You will also identify the major points you wish to learn about in the experiment.

Example: Find the resistance and inductance of a separately excited dc motor.

In the procedure section, give a summary of the methods used to measure and collect the data required in the experiment. Make this section in the form of numbered steps.

Example: 1. Connect a variable ac voltage source to the motor terminals.

2. Adjust the supply until motor stator current value is equal to motor rating.

Combine several small tasks into a single numbered topic to reduce the number of numbered subsections.
The data and results section documents the information collected during the experiment. Represent all data in a clear concise form. Use tables and graphs to collect and display the data into a presentable form. Use the correct units on all experimental quantities. Label the axis of the graphs and give them appropriate titles. Discuss the significance of the data and graphs contained in this section.

Software tools, such as Excel and MathCAD, make graphs and calculations simple to produce. Use these tools whenever possible. MathCAD makes it possible to produce an entire lab report that includes all sample calculations graphs and supporting procedures and discussions without using many other software packages.

Show sample calculations in the body of the report. Large data tables and other supporting calculations not directly related to the main topics of the experiment should be included in an appendix located after the main report. An appendix is not required when data tables are short. (10 entries or less)

Use figures to show how test setups were connected. Schematics of the models and circuits constructed for the experiment should also be included. Various software packages make drawing figures for lab experiments less laborious. AutoCAD, Visio, Paintbrush, Pspice, Multisim or any other graphic program can create images. Use cut/paste tools to transfer the graphic from one application to another.

In the conclusion section of the report, summarize the knowledge gained in the experiment.

The report body should be double-spaced and typewritten.
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Experiment #

Experiment Title

Reported by: name of student

Performed By: student name 1
student name 2
student name 3

Date Performed: