The lab report should be self-contained. Although you will work in groups in the laboratory, your report MUST be YOUR OWN work. Lab report will be graded on the following criteria:

1. GENERAL FORMAT (10%)

Format

- The entire report should be stapled or bound and NOT be placed in a folder or cover
- Text should be 1.0 line spaced and may be done in 11 point or 12 point font

Figures, Tables and Graphs

Figures, Tables and Graphs should each have a title and a number (graph titles are to be labeled BELOW the graph and table titles are to be labeled ABOVE the table). Graphs should have white background so data points and trendlines are easy to see. Graphs should have the axes labeled, the scale indicated, and should be of appropriate size for the reader to see the results. It is sometimes necessary to give a graph or table its own page. If placed within the text, tables and graphs should be separated from the text with appropriate borders. These graphs and tables should be referenced in the text.

Sections

The report should be divided into the sections discussed below. These sections should appear in the order presented.

2. TITLE PAGE

- Report Title
- Entity presented by (you)
- Group Number/Name
- Organization that the report was done for (University, Department & Course #)
- Date the Experiment was completed
- Date report was submitted

3. ABSTRACT (10%)

- The abstract is a brief description of what is contained in the report. It should cover the main purpose of the experiment, a general description of what was done, a general description of the equipments used, a broad overview of the results that were obtained, and conclusions as to whether the results seem reasonable. The abstract should be able to stand alone from the rest of the report. It should not directly refer to figures or tables or other content of the rest of the report.

4. TABLE OF CONTENTS, LIST OF FIGURES, LIST OF TABLES (5%)

- The Table of Contents should list all the sections and what page they start on
- List of Figures and list of tables should contain all figures and tables including name and number listed in the text and the page they start on.

5. INTRODUCTION (20%)

- Discuss the background necessary to understand the report. This would include brief description of theory, definitions of major terms, objective(s) and purpose of the lab, and any assumptions used during experiment.
- Discuss the properties that are extrapolated or calculated from the test.
- Short description of how the graphs were created and how the data was obtained.
• Appropriate background so that a common reader can understand the experiment.

6. **EXPERIMENTAL PROCEDURE (15%)**

• Create a list of steps as to how the experiment was conducted. Include a listing of equipment used, sketches or drawings of the test specimen(s) including dimensions of the specimen and the testing setup.

7. **TEST RESULTS AND ANALYSIS (35%)**

Your results should make use of charts and tables, and explain your figures including measured quantities, graphs or charts created for understanding the results, and any properties calculated. A minimum of the following should be included:

• Plot of test data measured directly from the lab test
• Plot of test data processed and used for the analysis.
• Explanation of what your results mean to the common reader *(do not restate the results).*
• If available, you should compare the obtained results with theoretical values or accepted reference values.
• Explain if the differences are significant.
• Identify any large errors and attempt to provide explanations of possible causes.

8. **CONCLUSIONS (5%)**

• Include observations and analysis of the lab test results.

9. **REFERENCES**

• List any references cited in the report.