**Two Part Lab Report Title:**

**Date:**

**Student Name(s):**

**Mechanics of Material 3270**

**Instructor Name(s):**

**Please Note: Informal Lab Reports are a professional piece of writing. Write each section in a logical, coherent manner using complete sentences, correct grammar and punctuation.**

**Template and Graphics**

* This template uses the same fonts as the Formal Report template (Calibri for titles, Cambria for text)
* All graphics (tables, graphs, and equations) should match those in the Formal Report
* For questions, see the Formal Lab Report template on the Technical Writing website at [www.engineeringessentials.com/writing](http://www.engineeringessentials.com/writing)

Adapted from Studylib “Writing Informal Lab Reports” https://studylib.net/doc/90494000/writing-informal -lab-reports ©2019.

**Introduction (5 points)**

The introduction will give background information about the experiment. It should also state the purpose of the investigation. This section will be 1-2 paragraphs long. For example, if we are conducting an experiment on “Hardness,” explain what hardness is. The entire report will be written in the 3rd person (objective voice).

**Hypothesis [Inquiry Question]** **(5 points)**

The hypothesis should be a single statement telling the exact thing you are trying to prove in your experiment.

**Materials (5 points)**

This section should be written in paragraph form and name all of the materials and equipment used. Be sure to include the specific number and composition of your test specimens.

**Procedure (5 points)**

This section includes one or more paragraphs explaining the step-by-step procedures used. Do not copy and paste the directions to the lab here. Present a summary of the directions in your own words.

**Results** **(20 points)**

*All lab questions and answers should be included with this section* (Number and underline the questions and then write the answers).

* All data should be collected and organized in a logical order.
* Results should be illustrated as charts, tables, graphs, and/or diagrams.
* All graphs should include a title, the independent variable labeled on the horizontal axis, and the dependent variable labeled on the vertical axis.

**Error Analysis and Relationship (10 points)**

Include any important factors that you think may have actually affected your results. Explain how the lab relates to what you have been learning in class.

**Discussion and Conclusion (20 points)**

Discussion is the most important part of your report, because here, you show that you understand the experiment beyond the simple level of completing it. This is where you give a detailed account of what happened in the experiment in paragraph form.

* Explain all the observations and results in your experiment.
* Analyze and interpret why these results were obtained. Be sure to tell the significance or meaning of the results.
* Restate the original hypothesis [inquiry question] and explain whether the experiment succeeded. If your hypothesis was not correct, you should analyze why the results were not as predicted.
* Explain experimental errors that appear in the results.

**Technical Writing (30 points)**

**Grading Distribution: 70 points Engineering content, 30 points Technical Writing content**

**Reminders**

* If you are a single author, adjust the header and the student name on the title page.
* Delete the blue text boxes after you use the information in them.
* When you are done, make sure your final version is clean. Under the Review tab, click the down arrow under “Accept” and then chose “Accept All Changes and Stop Tracking.”  Be sure to “save” this version. Your final report should be free of any mark-ups or comments.
* Be sure to proofread before submitting your report.