

***Lab Report Requirements**

EGR182 Introductory Mathematics for Engineering Applications

LAB REPORT: Write a technical report (approximately 2-4 pages, single-spaced but including graphs/sketches where appropriate). Technical writing style means do not use “I”, “me”, “we”, “our”. The report must contain the following sections:

Cover Page: Contains course number (plus section) and name, lab number and title, student’s name and lab partner’s name.

ABSTRACT: About 3-5 sentences that sum up your entire report. The abstract should answer two questions: What was the Lab project (“story”) about? What were the results (did everything work correctly or not)?

INTRODUCTION: About 3-5 sentences describing the experiment and its objectives.

EXPERIMENTAL SETUP: About 1-2 paragraphs and a few images (or hand-drawn diagrams) showing equipment and setup. Be as descriptive as possible. Actual assembly instructions are not that important. Just keep in mind someone should be able to reproduce your experiment (specifically, your data). So you need to describe your end product but not necessarily the steps to build it (unless they are relevant).

RESULTS AND DISCUSSION: About 1-3 paragraphs explaining your data. You must answer the questions listed in experiment description pages.

Clearly show relevant equations in your text body. You do not need to show each detailed step in solving...just the equations used and the results. Define each variable and summarize why the equations are appropriate.

CONCLUSION: About 2-3 sentences that summarize your findings.

Lab grading rubric—total points possible: 20

- 2: Lab activity participation (attendance + working with your partner) + Proper cover page
- 3: **Abstract** - 2 Points for Content: Must describe what was studied and a high-level result summary.
1 Point for Quality of Writing: Correct grammar, spelling, in technical writing style.
- 3: **Introduction** - 2 Points for Content: Must lead reader into the document + describe objectives.
1 Point for Quality of Writing: Correct grammar, spelling, in technical writing style.
- 5: **Experimental Setup** –
4 Points for Content: (2) Must clearly explain in words how experiment was performed;
(2) Must list details of equipment, include images / sketches.
1 Point for Quality of Writing: Correct grammar, spelling, in technical writing style.
- 5: **Results and Discussion** –
4 Points for Content: (2) Properly collected data;
(2) Explains data using relationships among variables + all assigned questions answered.
1 Point for Quality of Writing: Correct grammar, spelling, in technical writing style.
- 2: **Conclusion** - 1 Point for Content: A high-level summary of findings.
1 Point for Quality of Writing: Correct grammar, spelling, in technical writing style.