ECE 212 Lab Report Guidelines

The lab report must be a complete and precise description of **your** design. This includes but is not limited to the following: schematics, state tables (or graphs), description of methods and algorithms, code, testing strategies, and solutions. Marks are awarded for the overall quality and correctness of the lab report and the enclosed program code.

Report Format
The report must conform to the departments General Lab Report Style Guide.

- The order of the report is as follows (approximate section lengths are italicized):
  1. Title Page (1 page)
     The title page must contain:
     - Name of course and project (i.e. ECE 212 Lab 0)
     - Student Names **OR** ID numbers
     - Lab Section
     - Date of Report
  2. Table of Contents (1 page)
  3. Introduction (1 paragraph)
  4. Body of the Report (2-5 pages):
     - Design:
       A written description of the design of your program, and how it theoretically solves the problem posed in the lab exercise. It is not necessary to do a blow by blow description of each assembly language instruction. Discuss the overall structure of each section of code. Comments within the code itself (.s file) can describe each instruction's purpose.
     - Testing:
       Describes your strategy for testing your program, as well as detailed results. Unexpected or erroneous results should be noted, along with an explanation (or hypothesis) of why the error occurred. Do not give debugging anecdotes in the testing section. Debugging is not testing. Obtain clarification from the lab instructor if you are unsure about testing vs. debugging. Generally, testing is a predetermined number of test cases for which the tester expects a **predictable** output or result. The marking sheets for each lab contain a limited number of test cases. Use that as your initial guide.
     - Questions:
       Answer the questions from the lab handout in full sentence and paragraph form.
  5. Conclusion (1 paragraph)
  6. Appendix (contains, but not limited to):
     - Diagrams and flowcharts

- Assembler Code
  - Students names **AND** ID numbers must appear in a typed header on the assembler code.
  - The assembler code must be the **.s** file(You can print this off with any word editing program of your choice)
- Prelab(If there is one to submit)

7. **Marking sheet**
   - Students names **AND** ID numbers must be on the marking sheet.

- Report length will vary, but 5-10 pages is a reasonable amount (not including the appendix materials). To encourage consise writing, reports cannot exceed 20 pages (not including appendix materials). A penalty of **2 Marks per page** over 20 pages in the body of the report will be strictly enforced. There is no minimum length for the report but incomplete reports will be penalized accordingly.
- The font size for the body of the report must be between 10-14 points.
- Pages in the body and appendix must be numbered in Arabic Numerals (1,2,3 etc.). Do not number the title page. The table of contents and introduction are not part of the body of the report and are usually numbered with lowercase roman numerals (i,ii,iii etc.)
- All appendix items should be clearly labelled, and, in the case of diagrams, neatly drawn. If a diagram is hand drawn, it must be drawn using a straight edge, preferably on graph paper or engg paper.

Presentation Marks

There are 10 marks for presentation and they are broken down as follows:

- Grammar and Spelling - **5 marks**
- Organization and Presentation - **5 marks**

Deductions

Unless otherwise stated, the deductions are from the **Report** mark.

- Up to **5 marks** will be deducted for grammar and spelling errors. These marks will be deducted if there are a significant number of errors, or if the errors cause parts of the report to be incomprehensible.
- Up to **3 marks** will be deducted for an incomplete title page. All of the items listed above **MUST** appear on the title page.
- Up to **3 marks** will be deducted for handwritten additions in the title page, table of contents, introduction, body of the report, and conclusion. Handwritten annotations are acceptable in the appendix material, provided that the handwriting is clear and legible.

- There will be a **10 mark** deduction for not including your names **AND** student ID numbers in the assembler code.
- The assembler code **MUST** be the **.s** file If the file included is not the **.s** file, **10 marks** will be deducted.
- **10 marks** will be deducted for failing to include the marking sheet. **10 marks** will be deducted if the marking sheet does not have the names **AND** ID numbers of the group members.
- A report without any assembler code at all will receive a **50 mark** deduction.
- Reports must be typed (using a printer or typewriter). Handwritten reports are not acceptable, and will recieve a mark of **0**.
- A lab report without names **OR** ID numbers on the title page will receive a mark of **0**, as there is no way of knowing who wrote it.
- Bad code will be penalized, as will improper documentation of the assembly language code. A minimum of **10 marks** will be deducted for consistently improper or incomplete documentation of assembly language code.
- Do not include any assembly language specific code in your flowcharts. Flowcharts are meant to be translated into any high or low level language and should not contain any language specific code. Including language specific code in your flowcharts will be penalized a maximum of **3 Marks**