Lab Reports
A formal lab report is required for each of the lab exercises in this course. Reports must comply with the following format guidelines:

1. **Title Page**
   - Title (Lab name/description)
   - Name
   - Course number and name
   - Date

2. **Introduction**
   - Explain the background and objectives of the lab. Briefly state what was done in the lab, and what will be presented in the report.

3. **Body of Report**
   - Labs reports should be written in a linear fashion; that is, cover each major section (and subsection) as presented in the lab reader. Include the following items, *if applicable*, for each section:
     - **Discussion of Lab Exercise**
       - Discuss the underlying applicable theory and concepts that support what you are doing in simulation, etc.
     - **Data and/or Results**
       - Present output results in tabular, graphical, or numeric form, whichever indicates the results most clearly to the reader. Present all results from the required lab exercises.
     - **Discussion of Results**
       - Discuss the data, comparing actual results obtained in with what you expected. Analyze the results and discuss how they relate to the underlying theory.

4. **Summary and Conclusions**
   - Summarize what was done in the lab. Very briefly discuss findings and results.

Report Requirements
1. Use correct spelling, grammar, and punctuation. Neat, well-organized, professional appearance of your lab reports is critical.
2. Lab reports should cover only the sections of the lab specified at the beginning of the lab reader.
3. Your report must be one single document with figures and equations inserted in-line with the text.
4. Text of the report should flow smoothly and should be easily read and understood by someone unfamiliar with the lab.
5. Plots must have titles. Axes must be appropriately labeled, including units.
6. Figures must have captions, and equations must be numbered. Refer to them by number in the text. (e.g. “... as shown in Figure 1.”, “...as given by equation (3).”, “Substituting (6) into (4)...)”
7. Full-justify your text – i.e. align both left and right edges of the text on the page.
8. Avoid the use of the first person (I/we) in your lab reports. Use of the passive voice is generally preferred for technical writing.
9. Avoid the inclusion of opinions or qualitative comments (e.g. “The lab was difficult”, “I learned a lot”, etc.) in your lab reports.
10. Include full code listings in the appendix. Short segments of code may be inserted in the body of the report where appropriate.
11. Refer to the sample lab report available on the course website as guide for both formatting and content.