ECPE 174 – Written Project Report Format

General Report Guidelines:

- The project reports are to be written as professional technical documents, and with a technical audience in mind. Thus the language and presentation of the report's content should include the proper technical words and engineering symbols that are standard for describing the material at hand. However, do not assume the audience is aware of anything specific to the course or lab.
- The report should be thorough yet concise. Your goal is to submit a report that clearly describes all aspects of your design yet is not too long or overly verbose (nor too short or brief). There is no specific page length requirement.
- Your report should contain all items described below. However, each project team has complete flexibility as to how the report is organized and presented.
- The reports will be graded on quality of content, quality of organization, and presentation of content. See rubric for details.
- The report document, including all figure, graphs, equations, etc., must be typeset and submitted via Sakai.

The report should conform to the format above and include, at least, the following items:

1. **Title Page**: Includes project title, team leader and members, date of submission, etc.
2. **Introduction**: Overview of the project and a clear description of the entire set of project objectives.
3. **Theoretical Background**: Discusses theory behind project (and other applicable background issues) including any physical, mathematical, and engineering concepts and models that are needed to describe the function and outcome of your project design. Do not discuss your design solution or approach in this section – just those theoretical items necessary to understand it.
4. **Solution:** Explain your solution and overall approach to solving the problem.
   - 4.1. **System Diagram**: A complete block diagram of your entire system. The input/output signals (and/or other characteristics) of each block of your system should be clearly identified and well defined.
   - 4.2. **Design Description**: A thorough description of all designs that were used in your project (hardware, software, system design, paper design/calculations).
     - 4.2.1. Include any state machine diagrams
     - 4.2.2. Explain any additional external hardware requirements
     - 4.2.3. Include all code in an appendix to the report
5. **Testing Procedures**: Provide a complete and in-depth description of all testing your project team has carried out. Include any relevant plots or tables to support your results. Include the results of any simulations that you may have used to test your designs.

6. **Results and Discussion**: Include tables, plots and figures of measured results that verify the operation of the completed and implemented project design. Discuss your results and how they meet (or do not meet) your design specifications. Discuss any issues/obstacles that you may have encountered related to meeting the specs.
7. **Task Breakdown**: Description of each team member's responsibilities on the project, including design, testing, demonstration of design, written report, etc.
8. **Conclusion**: Summarize your project and provide reflections on what you have learned.