Assignment Sheet: Design Proposal
ECE 2031: Digital Design Laboratory

Point Distribution: **400 points: 200 points for the proposal itself, and 200 points for individual presentation style.**

Due Date: **Present to your GTA during scheduled times.**

Description of Proposal Presentation:

A proposal identifies a specific problem and states how the problem will be solved. Proposals outline **what** you will do, **how** you plan on doing it, and **why** that plan was chosen. Your proposal should be as detailed as possible! This means that you must be familiar with the topic and do some experimentation to ensure that what you propose is feasible.

Your team will present your proposal in a meeting with your GTA. Using PowerPoint or other presentation software, you will describe how you will approach the design challenge, and your reasons behind your decisions.

Presentation Requirements:

- The presentation must be under 10 minutes. Any part of the presentation that gets cut off cannot be graded.
- Each member of the group is required to present a nontrivial aspect of the proposal.
- Bring a printed copy of the slides for us to take notes on. In the print options, print four per page and select "pure black and white".

Content and Organization

For the purpose of this course, organize your presentation into the general outline below. This **does not** mean that you should have specific, labeled sections, but rather that your presentation should begin with an introduction, then discuss the technical aspects of your design, then move into your management plan, and end gracefully. The content should flow together logically. Each section will likely have multiple slides. You may conclude the presentation however you think is appropriate.

Introduction
- Describe the design problem and the project requirements to ensure that your viewer is prepared to understand your specific proposal from your perspective of the project.
- Briefly describe your team's solution to the problem – enough to introduce the rest of the technical content.

Technical Approach
- Describe the technical approach you are proposing, addressing the requirements from the project description.
- Focus on explaining **how** your team will solve the problem (how you will create, design, implement, test, verify, demonstrate, etc.) and **why** you have chosen that approach. Only stating your end goals will **not** convince your audience that your plan is worthwhile or feasible.
- If you have already done some experiments (which at the time of the proposal you should have), include relevant results to support the feasibility of your design. Anything that you can prove is already working will increase confidence in your proposed plan.

Management Plan
- Create a timeline of major parts of the project and deadlines. A Gantt chart is recommended.
  - **The timeline should be realistic.** Don't propose a design that can't be completed within the time available. Include the already-existing timeline of what you have accomplished.
  - **You should discuss division of labor.** Showing that your team is well-organized is one of the most effective ways to inspire confidence in your ability to complete your goals.
- Include a contingency plan, showing that you have considered what parts of your project might fail, and accounting specifically for how you will handle any problems that arise (if X does not work, you will do Y).