Proposal Format

4-6 pages (can be longer)

- Page lengths are based on pages being 12 point font (or smaller)
- Page lengths are based on pages being "singled spaced"
- Recommend you use Google doc format to allow for simultaneous team editing.
- Please submit the DRAFT and FINAL PROPOSAL as a PDF file

Proposal Outline

- Title of the Project (e.g. **"Wall Mapping Robot"**)
- ONE or MULTI-WORD HYPHENATED Short Team Name (e.g. **"ROVER"**)
    - short team name can be Hyphenated and/or CamelCase (e.g. **"BLUE-TEETH"**, **"BlueTeeth"**, or **"Blue-Teeth"**)
- A short, one-paragraph, multi-sentence overview of the project in the form of an abstract or small executive summary
- List Team Members and Likely Responsibilities
- Objectives (paragraphs)
    - what are you going to design and build?
    - what is the specific "mission" of the project? e.g. for a wireless sensor project, "detect intruders and notify"
    - describe what is a success?
    - describe what is a failure?
    - who is your customer?
- Design Constraints
    - specify constraints on the design, e.g. size, weight, performance, interfaces, cost (i.e. $200)
- Goals
    - detail specific Fall goals (experiments, tests, prototypes) and specific Spring goals (finished system, results)
- Prototype
    - **The team should complete a reasonable prototype at the end of the fall semester;**
    - describe that prototype
    (e.g. "circuit prototypes and early software demonstrating the functions of the proposed project")
- Approach (paragraphs and bullets)
    - overall scheme, design approach, design using ?
    - build this, integrate that, write this software, etc.
    - how to test, debug, etc.
- **Block Diagram (whatever makes sense - system, hardware, software) is REQUIRED**
    - can be hand-drawn (take a photo)

- Equipment Needed (bullets)
    - a rough idea of components (hardware, software, etc.) and other equipment needed (test equipment, etc.)
- Budget (assume $200 for now) (bullets)
    - cost if you know it or can estimate
- Plan/Schedule (across 2 semesters, provide more detail for Fall) (table or bullets)
    - a rough guess at the time frame to accomplish steps in the approach
    - milestones - these are defined points which demonstrate you are making progress toward your goal
- Challenges (paragraphs or bullets)
    - what is going to be hard (or hard for your team)
    - equipment that you don't understand
    - skills you need or have to learn
- References (if any)
    - include drawings if that helps explain the problem (can be hand-drawn and scanned/photographed)