Guidelines for Project Proposal

This document provides the guidelines for the preparation of your Project Proposal. The goal of the project is to design a lightweight structure (of your choice) that meets a design criterion (stress, deflection, and/or stiffness). Examples: landing gear, dome, roof, battery holder, etc. The depth and complexity of the project should be higher than that of the HW problems. Numerical results are required for the project.

At the *start* of the proposal include:
- Project title
- List of team members
- Date

The *body* of the proposal should include the following information:
- **Introduction** including motivation and background
- **Project objectives**
- **Proposed approach**
  - Your project must include:
    - **Structural Analysis**
    - **Failure Criteria**
    - **Design for Minimum Mass**
  - The proposed structural analysis, failure criteria, and design for minimum mass should lead to **numerical values**
  - Include a **list of tasks** along with the names of the specific team member(s) that will execute them
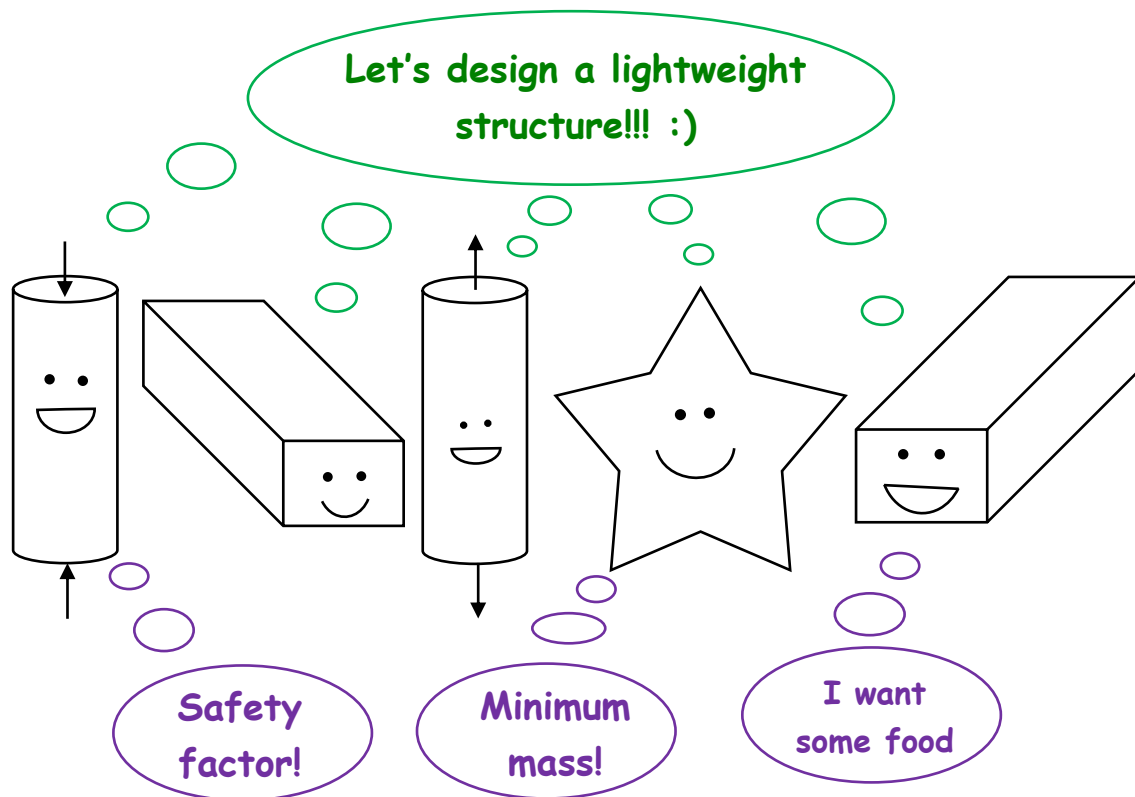- **References** (if any)

Style:
- Do not include a cover page and do not exceed 2 pages
- Use single-spaced, 12pt, Times New Roman font
- Use 1-inch margins

Additional notes:
- Preliminary results are not needed for the proposal. You only need to explain what you are planning to do for the project
- A project can receive full credit if it meets three or more of the following criteria:
  1. The studied structure has significantly higher geometric complexity than those in the examples, quizzes, and homework
  2. The numerical values for the material properties, geometry, and/or boundary conditions are based on a specific application
  3. Some of the simplifying assumptions made in the examples, quizzes, and homework are removed and the formulation for the structure becomes more accurate

4. Material models and boundary conditions different than those used in class are applied
5. The obtained results are verified with software such as Solidworks or Ansys

- The late submission policy is provided in the syllabus