***Project Grading Rubric***

**Abstract**

* **Unsatisfactory:** no proper title, purpose, or methodology. No summary of results or conclusion.
* **Poor**: misleading title, unclear purpose, or incorrect methodology. Summary of results and conclusion is lacking.
* **Satisfactory**: Appropriate title and an acceptable purpose. Methodology is sound with minor flaws. Summary of results and conclusion is provided but can be improved
* **Good**: Revealing and sound title with correct methodology. Results and conclusions are sound and properly summarized.
* **Excellent**: Engaging and sound title with clear and concise methodology. Summary of results and conclusions are complete and insightful.

**Motivation and Problem Statement Sections**

* **Unsatisfactory:** lacking or unclear motivation and problem statements
* **Poor**: Unconvincing or poor motivation and problem statements
* **Satisfactory:** Limited but relevant motivation and problem statements
* **Good**: Proper and clear motivation and problem statements
* **Excellent**: Strong and convincing motivations and well-defined problem statements

**Quality of Design/Proposed-Solution/Methodology**

* **Unsatisfactory:** no application of engineering principles or no valid solution to the problem
* **Poor**: limited application of engineering principles or flawed solution to the problem
* **Satisfactory**: engineering principles are applied, and the solution is somewhat complete and seems valid
* **Good**: sound application of engineering principles and a clearly valid solution to the problem. The iterative engineering design process is mostly followed with an acceptable solution.
* **Excellent:** sound application of engineering principles and a clearly valid solution to the problem. The iterative engineering design process is followed to produce an innovative solution after considering multiple possible ones.

**Requirements, Constraints, and Considerations Section**

* **Unsatisfactory:** no requirements, constraints, or consideration identified.
* **Poor:** limited or incorrect requirements, constraints, or consideration identified.
* **Satisfactory:** Correct but incomplete requirements, constraints, or considerations identified.
* **Good:** Correct and complete requirements, constraints, or considerations identified.
* **Excellent:** Correct and complete requirements, constraints, or considerations are identified and thoroughly discussed.

**Design Chapter**

* + **Unsatisfactory**: No or flawed design
  + **Poor:** Limited or incomplete design not incorporating constraints
  + **Satisfactory**: Average design with minor flaws addressing some of the constraints
  + **Good**: Proper design addressing most of the constraints and convincingly justifies unmet ones.
  + **Excellent**: Distinguished design addressing or exceeding constraints

**English Use**

* + - * **Structure**: 1 (Unsatisfactory) - 5 (Excellent)
      * **Graphics**: 1-5
      * **Figures, Tables, Equations**: 1-5
      * **Formatting**: 1-5
      * **Mechanics**: 1-5
      * **Documentation** **and References**: 1-5

**References Section**

* **Quality of Sources:** 1-5
  + **Relevance:** 1-5
  + **Recency**: 1-5
  + **Coverage**: 1-5
  + **Style:** 1-5

**Impact Statement Section**

* **Unsatisfactory:** impact on society, economy, and the environment is not discussed or flawed
* **Poor:** impact on society, economy, or the environment is discussed but is incomplete or suffers from major flaws
* **Satisfactory:** impact on society, economy, or the environment is discussed with minor flaws or missing issues
* **Good:** impact on society, economy, or the environment is correctly identified and discussed.
* **Excellent:** impact on society, economy, or the environment is thoroughly and insightfully identified and discussed.

**Team Dynamics Section**

* **Team Leader Identified: 1-5**
* **Team Leader Effective: 1-5**
* **Disputes and conflict resolution: 1-5**

**Team leader evaluation of team members**

* **Members attended to and contributed in meetings: 1-5**
* **Members submitted work in time: 1-5**
* **Members submitted quality work: 1-5**
* **Members communicated professionally: 1-5**

**Team members evaluation of team leader**

* **Leader assigned tasks and deadlines: 1-5**
* **Leader explained and provided information for tasks: 1-5**
* **Leader gave feedback on work: 1-5**
* **Leader resolved conflicts professionally: 1-5**
* **Leader communicated professionally: 1-5**

**Team Meeting Minutes**

* **Members are engaged in sharing ideas: 1-5**
* **Quality of discussions: 1-5**
* **Quality of action plan: 1-5**

**Goals and Objectives Section**

* **Quality of goals:** 1-5
* **Quality of objectives:** 1-5

**Gantt Chart**

* **Quality of tasks: 1-5**
* **Quality of allocated time: 1-5**
* **Dependencies correctly identified: 1-5**
* **Tasks are assigned to team members: 1-5**
* **Tasks are balanced: 1-5**

**Testing Plan and Acceptance Criteria Section**

* + - * **Unsatisfactory:** no experiments are designed to test project
      * **Poor:** Some testing was conducted but it is incomplete and not properly planned
      * **Satisfactory:** tests are planned and carried out, but are limited or do not address all the acceptance criteria
      * **Good:** tests are planned and carried out and they address the acceptance criteria.
      * **Excellent:** thorough testing is planned and performed, and the acceptance criteria is well-addressed

**Results, Analysis and Interpretation of Data, Summary, and Future Improvements Sections**

* + - * **Unsatisfactory:** no correct results are reported, no analysis is performed, or wrong conclusions drawn
      * **Poor:** some results are reported with minor and sometimes flawed analysis. Conclusions are reported by are flawed
      * **Satisfactory:** most results are reported with acceptable analysis and conclusions. Minor issues identified.
      * **Good:** All results are reported and analyzed with correct conclusions drawn.
      * **Excellent:** Results reporting is excellent and thorough. The analysis performed is deep and conclusions drawn insightful.

**Lessons Learned Section**

* **New knowledge acquired: 1-5**
* **New knowledge applied: 1-5**
* **New skills acquired: 1-5**
* **New skills applied: 1-5**