Project: _____

XE401 Mini Project Report Grading Rubric

1. Design description (see guidance document on XE401 website) (50) _____

- ☐ Title Page, Table of Contents

Problem Definition

- ☐ Introduction
  - Describes the problem context in own words
- ☐ Problem Statement/Product Vision
  - A short paragraph discussing the engineering problem to be solved

Requirements Analysis

- ☐ Backlog lists specified and implied requirements
- ☐ Include constraints on equipment and time

System Design

- ☐ Functional Block Diagram
  - Reflects "as built" system, not "as designed" (updated from the IPR)
  - Includes signal characteristics and microcontroller ports used
- ☐ Flow chart or algorithm for your software
  - Reflects "as built" system, not "as designed" (updated from the IPR)
- ☐ Design Methodology
  - Describes a solution using some or all of the available sensors
  - Consistent with the Block Diagram and Flow Chart / Algorithm presented
  - Explain and justify any design changes from the IPR

Detailed Design, System Integration & Test

- ☐ Subsystem Design and Tests
  - Describes how each subsystem was designed / operates
  - Tests and results for each subsystem (i.e. how the function was confirmed)
- ☐ Integration tests and results
  - Describes how (the process through which) the subsystems were integrated, a systematic process
  - Includes how the code was integrated
  - Tests and results for the system as a whole

Properly Functioning System

- ☐ Final Results
  - Includes the results from the Project Demo
  - Includes a photo of the completed design
  - Expands/explains the results (ie. more than a list of the results)
- ☐ Conclusions

Additional Information

- ☐ References
- ☐ Code submission: originality, effectiveness, adherence to algorithm, provide the URL to the GitHub repository.

2. Peer Eval Submitted (5) _____

3. Robot and Parts kits turned in, lab space cleaned (5) _____

Project: _____

4. Format, Writing Quality (15) _____

- Emailed to the instructor on time
- Electronically signed or scanned signed hardcopy cover sheet
- Correct spelling, grammar, use of technical terms
- Consistent formatting throughout (headings, captions, indentation, pagination, etc).
- Appropriate tone, avoidance of passive voice, consistent tense
- Figures and tables labeled and referenced in the body of the text
- Figures from texts or datasheets and all other references are properly cited

TOTAL (75) _____