**General Guidelines for ppt for Final Presentation for Senior Design II**

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**Total number of slides should be 28+/-4**

1. **Cover Page (1)**
2. **Outline (1)**
3. **Elevator Speech (Stating Problem, Solution Strategy, & Impact) (1)**
4. **Problem Formulation: WHAT IS THE PROBLEM YOU'RE SOLVING? (3)**
5. **Problem Definition including Background Research**
6. **Goals, Objectives, & Constraints**
7. **QFD**
8. **Final Design: WHAT IS YOUR SOLUTION (RESULTS)? (Max 6)**
9. **Concept Generation Methodology**
10. **Major Assumptions**
11. **Key Analysis and Software Involved (equations used and/or software)**
12. **Key Features, Expected Outcomes, & Over-riding Factors, if any**
13. **Final Design**
14. **Manufacturing Process (Max 5)**
15. **Bill of Materials & identify Key Components(1)**
16. **Manufacturing method. Use plenty of pictures and appropriate instructions (2-3)**
17. **Assembly process (how you put all the parts and sub-components together to build the product/prototype). Use plenty of pictures and appropriate instructions (2-3)**
18. **Videos as needed**
19. **Picture of final product w/appropriate labels (Show appropriate scale to define the size)**
20. **Compare final product w/final design (1)**
21. **Operations Manual (How to operate the product w/safety concerns?) (1)**
22. **Maintenance Manual, if needed and/or useful (1)**
23. **Test Details (how did you verify your design satisfies prescribed constraints) (1-2)**
24. **Test details (Objectives, Inputs, and Outcomes) (1)**
25. **Test protocols and related forms (Add A Typical Form) (1)**
26. **Safety measures**
27. **Shutdown protocol**
28. **Maintenance, if needed**
29. **NOT giving attention to units is the most common mistake!**
30. **NOT using a scale bar to show drawings & pictures is another common mistake!**
31. **Test Results & Data Analysis (4-6)**

 **a. Raw data**

 **b. Data analysis (Clearly show all equations, software, etc. Clearly spell ALL UNITS!)**

 **c. Tables and Graphs**

 **d. Pictures during experiments**

1. **Results & Discussions (1)**
2. **Conclusions (1)**
3. **Best Practices (1)**
4. **Lessons Learned (1)**
5. **Summary (1)**
6. **Future Recommendations (1)**
7. **References (1)**
8. **Acknowledgement (if necessary like other complementary groups) (1)**
9. **Prototype Demonstration**

**NOTES: Mostly SDI (Max. 10 Minutes)**

 **Mostly SDII**

 **Combined**

 **Highlighted topics & slides are MUST**

 **Key Alerts**