## **Final Design Report Rubric**

**EDD 104 Section #:** \_\_\_\_\_\_\_ **Project #:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Project Name:**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## **Report Content: Total: \_\_\_\_\_/80**

**Cover Page:**

\_\_\_/1 EDD 104, Section #, Project # and Name, Team Member Names

\_\_\_/1 Included picture relevant to the project

**Executive summary:**

\_\_\_/1 No longer than 1 page.

\_\_\_/3 Summary of the entire report.

\_\_\_/6 Include enough detail for client to read and understand the contents. Write it for a client who might be reviewing designs from several companies and will only buy one design and may not be engineer.

**Table of Contents:**

\_\_\_/1 Use the same font used throughout the report

\_\_\_/1 Connect the listed items to the page numbers, for example, “Introduction…………..1”.

**Introduction/Background:**

\_\_\_/10 Introduced the background and motivation for the project. It can be understood by someone with no prior knowledge of the project.

**Design Statement:**

\_\_\_/1 Exact Design Statement given in Project Description

**Design Focus:**

\_\_\_/2 Introduced the System Level Requirements

\_\_\_/1 Introduced the Evaluation Criteria and weights

\_\_\_/2 Explained why those criteria were chosen and assigned those weights

**Discussion:**

\_\_\_/10 Clearly and convincingly explained how the System Level Requirements were verified using supporting evidence. Reference the requirements and verifications in Appendices A, B, and C.

\_\_\_/2 What was the rating of the Final Design using the Evaluation Matrix? Refer to Appendix E.

\_\_\_/2 How did this compare to the ratings of the Viable Designs? Refer to Appendix F-H. (if Team had only 2 alternatives, have Appendices F and G only).

\_\_\_/6 How were the Viable Designs altered and/or combined to form the Final Design?

**Conclusion:**

\_\_\_/10 Summary of the key design features that make your design stand out from others.

\_\_\_/2 Relate design back to Design Statement.

**Citations/References:**

\_\_\_/5 In-text citations in proper APA format.

\_\_\_/5 Reference Page- comprehensive for all members in proper APA format.

**REFERENCES and RELIABILITY**

\_\_\_/8 Not only a complete list of all references used by every team member in a single document. Must start on new page and be in correct and complete APA format, this means all sources are listed in alphabetical order by last name of author, and/or name of website. Have doi or url if applicable, and websites correctly/completely formatted. SOURCES MUST BE RELIABLE. 2 points deducted for each unreliable source up to 8 points.

## **Overall Report: Total: \_\_\_\_\_/15**

**Formatting:**

\_\_\_/0.5 Page format: 1-inch margins top, bottom, left and right.

\_\_\_/0.5 12 – point, Times New Roman font

\_\_\_/0.5 Headings only should be bold, no space between heading and text

\_\_\_/0.5 Single space paragraphs.

\_\_\_/0.5 Double space between paragraphs, do not indent

\_\_\_/0.5 Page number at bottom right of every page

**Order of Content in the Report**

\_\_\_/2 Documents are in the order outlined in the guidelines.

**Conventions and Language:**

\_\_\_/5 Demonstrates thorough control of language and writing conventions with few errors, and lacks any spelling, grammar, syntax or typographic errors.

\_\_\_/5 Language used is clear, concise and provides an easy to read and understand explanation of the process the team used and the design selected, including explaining clearly why the final design both meets the project’s Design Statement, and explains why this is the best design solution.

**TOTAL REPORT GRADE (less 5 pts pair/trio grade):\_\_\_\_\_\_\_\_\_\_\_\_/95**

**Pair/Trio Content: (pair/trio grade only) Total: \_\_\_\_\_/5**

**Appendix F-G: Alternative Viable Design Reports**

Included the Alternative Viable Design Reports for all pairs/trios

\_\_\_/5 Pair/Trio 1 Names: **TOTAL REPORT:\_\_\_\_\_\_/100**

\_\_\_/5 Pair/Trio 2 Names: **TOTAL REPORT:\_\_\_\_\_\_/100**

\_\_\_/5 Pair/Trio 3 (if applicable) Names: **TOTAL REPORT:\_\_\_\_\_\_/100**

**Appendices:**

* Appendix A: Requirements
  + Requirements Structure
  + Project Requirements List and Justifications
* Appendix B: Verification of Requirements
  + Start each verification on a new page with the requirement listed at the top of the page.
  + Each team member needs to write verifications for AT LEAST two requirements.
  + All requirements, including System level requirements, need verifications.
* Appendix C: Supporting Documents
  + Model results, Code, CAD Models, used for the verifications
* Appendix D: Cost Analysis
  + Make a convincing case for how much you expect each part/feature to cost based on existing technology/materials etc. For standard parts, you can include links to where you would purchase the parts and how much they cost. For custom parts, estimate the cost based on materials, labor, shipping, etc. Report final cost estimates in the **Design Description** section and refer to this appendix.
* Appendix E: Evaluation Matrix
  + Show the completed Evaluation Matrix for all the Viable Designs and the Final Design.
* ~~Appendix F: Research Table~~
  + ~~Include a research table for every source listed in the references.~~
* Appendix G-I: Viable Design Reports (one appendix for each report)
  + All team members should include their original Viable Design Report as an appendix. Any instructor feedback should be incorporated into the rest of the Final Design Report.

(In Appendices--Black is graded by 112 TA/CEO ; RED is graded by 104 instructor)