Email final reports by the evening before the day of the Final Presentations.

No exceptions.

PLEASE compress picture sizes so that the resulting doc/docx is not huge! Reports SHOULD BE less than 5 MB.

Department of Biomedical Engineering
Final Report BME 496 Capstone Design II

[Title of Project]

[Names of Team]

[Name(s) Sponsor/Advisor]

[Date]

Final Report BME 496 Capstone II

Format for Capstone Design II Final Reports

All reports should be printed with Arial 12 point font, single spaced, (except for Cover page which should be in 16 point), and should use the following template.

Documents SHOULD BE less than 1 MB. PLEASE compress picture sizes. Do not cut-and-paste appendices into this document. Maintain appendices as separate documents. Zip all files together for final email submission.

1 Abstract

2-3 paragraphs with sufficient detail to acquaint the reader with the project. This should summarize the need, customer, what you did, and how it worked overall.

2 Project background

Literature review, existing technologies (summary of competitive analysis WITH SPECIFICS, market/user profile. Limit to 2 pages.

3 Customer Needs to Test Results

Approximately ½ page or less.

Show the traceability from Customer Needs to Test Results

4 Design Requirements

Approximately 1 page or less: <u>Summarize</u> the design requirements. List the major functional requirements against which you tested. Include a reference to the appendix where the complete version is provided.

5 Design Concepts and Evaluation

3 pages maximum: Discuss concepts proposed to meet customer needs. Identify rationale for selecting and rejecting concepts, and how you settled on the concept you selected and show the evaluation you made.

6 Final Design

Limit 3 pages: Describe the <u>details</u> of the final concept and design. Explain the way the design functions. Include drawings, s/w logic, circuit diagrams, photos, etc to explain the final design. Discuss costs, manufacturing methods/processes, etc.

7 Test plans

Approximately 1 page or less: <u>Summarize</u> the results of the testing. Use a table that lists the requirement with each associated test and the accompanying result of the test.

8 Evaluation of Design (Results from executing the test plan)

Limit 3 pages: Discuss the <u>details</u> of the test results. If any tests failed, describe the problem and whether a design change is needed and how you would have done things differently. (Was it the design? The construction? A bad test to start with? Etc.) Prioritize how the tests results are presented (most interesting first). Discuss tests that could not be performed and why. Include a reference to the appendix where the complete executed version is provided.

9 Schedule

Approximately 2 pages or less: Discuss how your team was able to meet this schedule, and what problems occurred. Why did they occur? What contingencies did you implement to address these? What recommendations do you have?

10 Future Considerations

Approximately 1 page or less: Discuss work that remains to be accomplished.

Offer suggestions for improvements if the project were to continue.

11 Product and Development Budget Comparison between Capstone I and II.

Approximately 2 pages or less: Compare the final expenditures with the Capstone I budget. Explain the differences between these and why they occurred. What recommendations do you have?

12 Lessons Learned

Limit 2 pages: Describe what you learned in designing, building, and testing the product; and what was learned working in a team environment. What you do differently knowing what you now know if you would have to redo it again.

13 Qualifications and Roles of the Team

Approximately 1 page or less Discuss who did what throughout the program. Specifics count.

14 References

List references in proper format and annotations.

15 CUSTOMER FEEDBACK/REVIEW/ACCEPTANCE

Include your customer/advisor's evaluation of your project. Attach this feedback form after the references and before the appendices with a signature. A template is on the website. Reports will not be graded without a customer/advisor evaluation of the progress and final deliverable.

16 Appendices

- A. Design Requirements Document (in formal document template format and no TBDs)
- B.1. Mechanical drawings, circuit diagrams, software listings and flowcharts, chemical processes, etc. not included in section A.
- B.2 Compete Parts List.
- B.3 Final Assembly/fabrication/production instructions.
- B.4 User Manuals: including assembly instructions, chemical preparation instructions, software operation, software modification manuals, etc.
- C. Executed Test Plan (in formal document template format)
- D. Completed Project Plan (Schedule).