Executive Summary Guidelines for ME 388

An executive summary is a greatly reduced version of a formal report. For the experiments in this course, it should be no more than four-to-six pages of text plus figures, data plots and tables, and analyses (uncertainty and/or Chauvenet’s criteria, etc.). The executive summary should be a self-contained, stand-alone document.

The purpose of the executive summary is to consolidate the major points of the experiment and analysis. It must cover this information in enough detail to permit an executive (the instructor for this course) to digest the significance of the work performed. Executive summaries are intended for an audience of “busy executives” who may have to make decisions (technical or otherwise) on funding, personnel, policy, etc. based on findings or recommendations in this report.

The executive summary is a comprehensive statement of the work’s **purpose, scope, methods, results, conclusions, findings, and recommendations**. The executive summary condenses the entire work, explains how the results were obtained, and why the recommendations were made. An executive summary is often prepared as a summary of a long formal report, stating the results and recommendations and providing only enough information for a reader to decide whether to read the entire work. For this course, the executive summary will be the report for two of the labs.

The executive summary is to be organized in the same manner as a formal report, only it will not go into the same level of depth (particularly the level of detail that would be included in an introduction, experimental apparatus and procedure and discussion sections of a formal report). Similar to a formal report, the executive summary should be well organized and flow well to communicate a story. The following outline should be used. Remember to keep the total written length less than 5 pages. Attach figures (including data plots), tables and analyses, at the end, making reference to them in your text (i.e., Figure 1 shows pump head as a function of flow rate.)

1. **Purpose and scope of experiment** (10%) – What were you supposed to achieve from AND what you did for collecting the data and doing the analysis.

2. **Methods** (10%) – Explain how the experiment was performed, what equipment was used and what data was gathered. A figure of the apparatus and table of the uncertainties should be attached at the end of the “report” but should be referred to in this paragraph.

3. **Results** (50%) – Present the results of the experiment and analysis as specified in the Experimental Guidelines. Present and develop equations in an attached appendix. Attach figures presenting the reduced data to the summary. Consider the following statement as an example. *Figure 1 shows the increase in pump head with increasing impeller speed and decreasing flow rate, where the flow rate was determined with the venturi meter. Equations presented in Appendix A.*

4. **Conclusions** (15%) – Presents clear, concise statements of the significant findings.

5. **Recommendations** (15%) – What would you do to improve the lab or improve your work?