**EEL 4914 Senior Design I**

**Divide and Conquer Guideline**

The Divide and Conquer document acts as the proposal of your Senior Design project. It should be at least 10-page long and contain all, but not limited to, the following content.

**Cover Page**

* + descriptive title of the project
  + group number
  + group members’ names
  + group members’ degree majors
  + reviewers, advisors, sponsors, customers or significant contributors

**Content** (at least 10 pages)

* + motivation and background
  + goals and objectives/design requirements including basic, advance and stretch goals
  + description of features/functionalities
    - * + reference any input from customers or marketing analysis of comparable products/projects that has been used to identify project features
  + existing product/past project/prior related work
  + table of at least 7 key engineering specifications with quantitative measures
    - highlight 3 demonstrable specifications
  + detailed hardware block diagram (at least one)
    - use color blocks to indicate work distribution
    - indicate both the input and output of each block
    - illustrate clearly the external inputs and outputs of your system
    - indicate the status of each block (to be acquired, acquired, investigating, designing, prototyping, completed)
    - legend (if applicable)
    - include as much detail as possible to facilitate clear understanding of the diagram
  + detailed software diagram/flowchart (at least one)
    - use color blocks to indicate work distribution
    - indicate both the input and output of each block
    - legend (if applicable)
    - include as much detail as possible to facilitate clear understanding of the diagram
  + prototype illustration (if applicable)
  + house of quality
  + budget and financing
  + project milestones for SD1 and SD2

**NOTE:** The above sequence of items does not necessarily indicate the order of content of your report. To produce a well-written report, you need to organize the content in a way that allows the passages to flow, paragraphs to be coherently interconnected, and ideas to be logically connected from one to another, so that your readers can easily grasp and understand the overall pictures and details of your project.

**Appendices**

* + **Appendix A** – reference
  + **Appendix B** – copyright permission
  + **Appendix C** – etc.

**NOTE:** The answer to the question “Do I need to cite this material?” is always a

'YES’. The reason is simple. It is always better to provide proper citation than

not. So, please contact the authors/creators/producers to request for permission to use

their material. All requests and approvals should be documented in this section. For

all requests that have been rejected, the corresponding materials MUST be removed

from the final document.