EGR110C Design Report Assignment—Draft

Due Date: Design Report (draft) is due at the beginning of class on Friday, October 12.

Description: Each student will independently write a report describing the device that the group currently plans on building for the competition.

Resources: The project description document and some example reports and sketches are on the course website under the Project Information link.

Sketches: It is fine to do the sketches by hand. There is a scanner in Shiley Hall 208 that you can use to scan in the sketches. Please scan the sketches in black and white mode and 300 dpi or less to reduce the file size as there is a maximum file size of 10 Mbytes total for your whole report. You can also shrink the size of images using www.shrinkpictures.com.

Peer Review: Peer review is a necessary part of the writing process. Ask one of your classmates or set up a meeting with the writing center to discuss your report before you hand it in. Go to the following website for details on how to make an appointment: <u>http://www.up.edu/lrc/writing/default.aspx?cid=258&pid=234</u>.

How to submit the assignment: Only submit a <u>softcopy</u> of your report by going to the Pilots portal <u>https://pilots.up.edu</u>, clicking on the EGR110 link, clicking on the Design Report (draft) link, and uploading the file. Microsoft Word format is preferred. (If you want to use another format, contact the instructor before the due date to see if it is acceptable.)

Filename: The filename must be "Team C? FirstName LastName Design Report Draft.docx" where the question mark is replaced by your team number, and FirstName is replaced by your first name and LastName is replaced by your last name. So for example, if I were on team C11, my filename would be "Team C11 Aziz Inan Design Report Draft.docx".

Late Policy: It is important to turn in professional work on time, so please submit your file early. If the report is late, 5% will be deducted for up to 2 hour late, 15% for up to 24 hours late, and then an additional 20% for up to each 24 hour period after that. So for example, a report submitted one minute late would lose 5%, a report submitted at 2 hours and 1 minute late will lose 15%, and a report submitted 24 hours and 1 minute late will lose 35%.

Bonus: If you get 90% or above on the Design Report (draft), you will not need to submit a file for the Design Report (revised) assignment. If you choose not to submit a file for the revised assignment, the score from the Design Report (draft) will be used for both assignments.

EGR110C Design Report Draft Grading Guidelines

FORMAT: _____ points out of 15

- Filename is "Team C? FirstName LastName Design Report Draft.docx"
- Page Numbers at bottom of page, except on title page
- Headings and Subheadings Included
- Paragraphs Clearly Delineated (tabbed or separated by a blank line)
- Start sections with a paragraph, **not** a table, figure, or list
- Figure and Tables
 - Keep tables on a single page if possible
 - o Number figures sequentially; number tables sequentially
 - Captions (above the tables, below the figures)
 - Keep titles on the same page as the figure or table
 - o Refer to each figure or table in the text before it appears
- Consistent Font (12 point Times New Roman)

CONTENT: _____ points out of 35

- Title Page
 - o Title/Name/Group Number (for example C11)/Affiliation/Date
- Introduction
 - o Executive summary of the competition and your device
 - Purpose of the report
 - Content of the report
- Background
 - Briefly summarize the competition setup, scoring, and rules
 - Team Goal (which award is your device designed to win?)
- Discussion
 - o Design Process
 - Alternatives considered
 - Advantages of the chosen design
 - Risks/disadvantages of the chosen design
 - o Device
 - Explain how the device will operate
 - Sketches of device (all three views plus additional diagram)
 - o Testing
 - Plan for testing the device
 - Budget (list of parts to be purchased, expected cost of the device)
 - Project Schedule
 - Detailed plan of design, construction, and testing with anticipated dates

- Summary
 - Summarize the major points of the report
- References
 - You <u>must</u> cite the source of any material such as text, figures, tables, etc. taken from other sources even if they are modified
 - Cite "First Year Design Project" and <u>at least one other credible and</u> <u>relevant source</u>
 - Include complete reference information with a conventional reference style (title, author, publication date, etc.). For examples, see <u>http://lib.calpoly.edu/research/citations/cse.html</u>.
 - In the reference section, number the citations [1], [2], etc.
 - Refer to the citations in the text of the report using [1], [2], etc.

STYLE: _____ points out of 35

- Writing and Grammar
 - No plagiarism (cite source of any material such as text, figures, tables, etc. taken from other sources even if they are modified)
 - o Accuracy, Brevity, Clarity
 - o Avoid contractions
 - Complete Sentences with appropriate English words
 - Proper spelling, grammar, punctuation (no slang or conversational style)
 - Third person voice (for example "<u>Team D1</u> build the device" instead of "<u>We</u> built the device"
 - Define abbreviations the first time they are used
 - Transitions between paragraphs

INDIVIDUAL DEVICE SKETCH: _____ points out of 15

- Each team member produces one view of the device, and includes sketches from the other team members
- All sketches include the name of the team member who drew it
- Title, labels where appropriate, scale
- Neatness (straight lines, neat penmanship)
- All sketches are consistent (refer to the same device)

TOTAL: _____ points out of 100