

Final Project Grading Criteria

Wednesday, June 6, 2012

200 Points Total Name _____

One objective for your Final Project is the generation of files and drawings that can serve as a portfolio to be demonstrated to potential future employers. Therefore, when grading, your drawings will not be marked up but will be graded using this checklist. Your graded set of drawings will be available as a packet in the *Box* during the first 2 weeks of next fall quarter or by other arrangements. For the Final Project presentations, print this out, sign it and hand it in at the instructor's desk after the presentations.

Grading for your Final Project will be as follows (200pts total):

Final Project Abstract, (up to 20pts total, 10%)

Final Project Peer Evaluation, (50pts total, 25%)

- Your score is determined by the average value of all of your peers' evaluation in certain categories of your presentation similar to the values on your Pre-Presentation evaluations that you received in Week 9.
- Comments are welcome but not graded.
- Exceptions follow:
 - If you give all 10s on every sheet or all 0s or any other number (demonstrating a lack of commitment to the task at hand) you will receive 0 points in this section, provide a fair assessment
- Time, 6 minutes, practice your presentation!
 - For each minute over or under subtract 5 points

SolidWorks toolbar or function demonstration, measures the research, practice and competence for the toolbar or function that you are attempting to demonstrate. (30pts total, 15%)

- Demonstrate at least 5 tools in a toolbar or 2 areas in a function (i.e. simulation, a before and after) (20 points)
 - Demonstrate at least 15 steps, options or choices total in either a toolbar or function (10 points)

Project Design (60pts total, 30%). Determines the effort put into your project by measuring model complexity. There is an opportunity for extra credit for going beyond what is asked for in this section, up to 20%.

- An average of 20 appropriate sketch relations or dimensions for the 5 most complex parts (20pts) (excludes redundant and symmetric relations and dimensions) and/or
- An average of 12 appropriate part features for the 5 most complex parts (20 pts) and/or
- An average of 10 appropriate parts in an assembly (20 pts)
- Send these files as a "Pack and Go..." zip file with the photo real image of your assembly that will be on your Cover sheet. A 20% penalty for each missing file and image.

Final Project Drawings, 5 drawings (10pts each, 40pts total, 20%). Four drawings will be graded, the best 2 part drawings plus the Cover and Exploded Assembly sheets. **Drawings due by Friday, 5pm in the Box.**

- There is an opportunity for extra credit for going beyond what is asked for in this section, up to 20%.

- A 20% penalty for a missing or incomplete 5th drawing.
- A 20% penalty for printing during the presentations (print before or after class).
- Drawings include:
 - Cover Sheet with a photo real image(s) of your assembly along with project name and designer.
 - At least three part drawings of your choice (choose the more complex ones)
 - Exploded assembly drawing with a Bill of Materials, Balloons and Exploded Line Sketches (very few or no dimensions on this sheet but have basic dimensions for length and width if appropriate)
 - Other drawings for extra credit if desired but only if it adds to the information attempting to be communicated with your project
- Grading criteria for all drawings include:
 - B size printed in the lab, gray scale, ANSI dimensioning standard, appropriate precision, appropriate sheet scale, views laid out with appropriate spacing and symmetry, color for Cover Sheet (1.5 pts each sheet)
 - Title Block items as prescribed throughout the quarter
 - Logo (unique with company information), your name, part name, file name, company name, units of measure, dimensioning standard, confidentiality statement (filled in with your company name) (1.5 pts each sheet)
 - View titles properly placed on the Sheet Notes layer, CAPITALS, centered below and underlined (1 pt)
 - Cover Sheet drawing graded as follows:
 - Image(s) of the assembly or an important part, make this look attractive using various settings, angles, textures, scenes, image transparency and lights (4pts), project name and designer in large bold lettering (1pt each)
 - Part drawings graded as follows:
 - Three standard views (ignore redundant views if needed), Isometric view with at least 2 auxiliary view(s) of your choice and as many as needed for extra credit but only if it adds to the information attempting to be demonstrated with your project. Sheet metal projects will have a flat pattern in a view. (2 pts)
 - Various display states for the different views as appropriate, must show some variation (1 pt)
 - Dimensions, complete, organized and visible on the Dimension layer (3 pts)
 - At least 8 dimensions with 3 different types of tolerances, over the 3 sheets on the appropriate features on your parts (1 pt)
 - At least 3 Datums and 3 Feature Control Frames on the appropriate toleranced dimensions, features or surfaces referring to the datums, they need to make sense. (2 pts)
 - Exploded assembly drawing graded as follows:
 - Bill of Materials, on the Sheet Notes layer, organized and neat, categories from previous assignments, must make sense (2 pts)
 - Balloons, circular split line, organized and visible on the Dimension layer (2 pts)
 - Explode Line Sketches, complete, organized and visible on the Dimension layer (2 pts)