EML2322L – MAE Design and Manufacturing Laboratory

Design Report 3 (Detailed Design) Grading Rubric *[30 points total]*

The following should typically take 1.5 – 2 hours per group, depending on the quality of work previously submitted during last week's Design Review. ***ALL comments should be make using red text and the Adobe "Fill and Sign Tool"****. Please bill full-time for the time you spend grading the reports.*

1. *Remove your previously completed* ***Detailed Design Checklist*** *for reference during this second evaluation.*
2. *Compute the group's first DR3 submission score by weighting your formerly completed* ***Final Design Checklist*** *and* ***Detailed Design Checklist*** *grades each 50% and recording the grade in pencil in the appropriate location at the top of the* ***Detailed Design (DR3) Grade Sheet****. If either of these graded checklists and/or the original DR3 was not resubmitted, underline the respective item(s) on the* ***Detailed Design (DR3) Grade Sheet****, and issue the noted deduction(s).*
3. *Critically evaluate the DR3 resubmission by filling out a new* ***Detailed Design Checklist*** *(use red ink). Pay close attention to the NO checkmarks received on the original* ***Detailed Design Checklist*** *you completed to ensure groups fixed their weaknesses/mistakes/omissions.*
4. *Focus your attention on critically reviewing all drawings and BOMs, noting mistakes and omissions. Circle mistakes and write corrections and suggestions for improvement.* ***This is among the most valuable feedback students receive in the course, so please take time to review this material thoroughly.*** *Remember that the principal goal of this resubmission is for another group to be capable of manufacturing and assembling your team's design without error or further communication with the group.*
5. *Briefly review the rest of the resubmission to ensure all items listed on the new* ***Detailed Design Checklist*** *are complete. If you find additional mistakes, note them in the report but do not penalize the group if you issued a YES for the same item(s) previously during the design review (unless it's the first time you're grading this portion of your group's submission).*
6. *Fill out a* ***Detailed Design (DR3) Grade Sheet*** *by summarizing the reason(s) for each NO received on your newly completed* ***Detailed Design Checklist****.*
7. *Denote your suggested point deductions in the left-hand margin of the* ***Detailed Design (DR3) Grade Sheet*** *you filled out. Be lenient on mistakes you did not catch last week (highlight the mistakes but be gentle on the point deduction(s) if you feel you should have caught them in last week's feedback). But be stern with mistakes on material which was not submitted last week for your review. Ask me or a senior TA any questions about which you are unsure.*
8. *Type the suggested grade at the top right of the first page in the grade sheet with red ink (e.g. 25.5/30). NOTE: Do not enter any grades into the grade box on the right-hand panel. Once normalized, I will enter in the grade.*
9. *Save the completed Grade Sheet with the filename "Group_#letter_DR3R_Grade_Sheet.pdf" and upload it as a comment to the group's DR3 resubmission (e.g. For group 1A: "Group_1A_DR3R_Grade_Sheet.pdf".* ***This DR3R Grading Rubric is for your benefit only and should not be given to the students.***
10. *Save the completed Design Review Checklist with the filename "Group_#letter_DR3R_Checklist.pdf" and upload it as a comment to the group's DR3R Canvas submission (e.g. For group 1A: "Group_1A_DR3R_Checklist.pdf").*

(GRADING RUBRIC FOR THIS SECTION CONTINUED ON NEXT PAGE)

11. *Mark the status of your grading on the **DR Grading Status Sheet**.*

12. *Try your best to complete the group's DR3R grading within 72 hours, but if you need a little more time due to your busy course loads, that's no problem.*

[-XX pts] Report Organization (deductions for mistakes)

Make deductions for mistakes noted on the DR3 Grade Sheet. Summarize the mistake on the lines provided.

[+10 to -5 pts] Group Size Compensation (compensate 3 or 5 member groups)

Since the ideal group size is four members, this adjustment normalizes grades for groups containing three or five members. If you're not sure what to mark, leave this section blank and I will make the appropriate adjustment.
