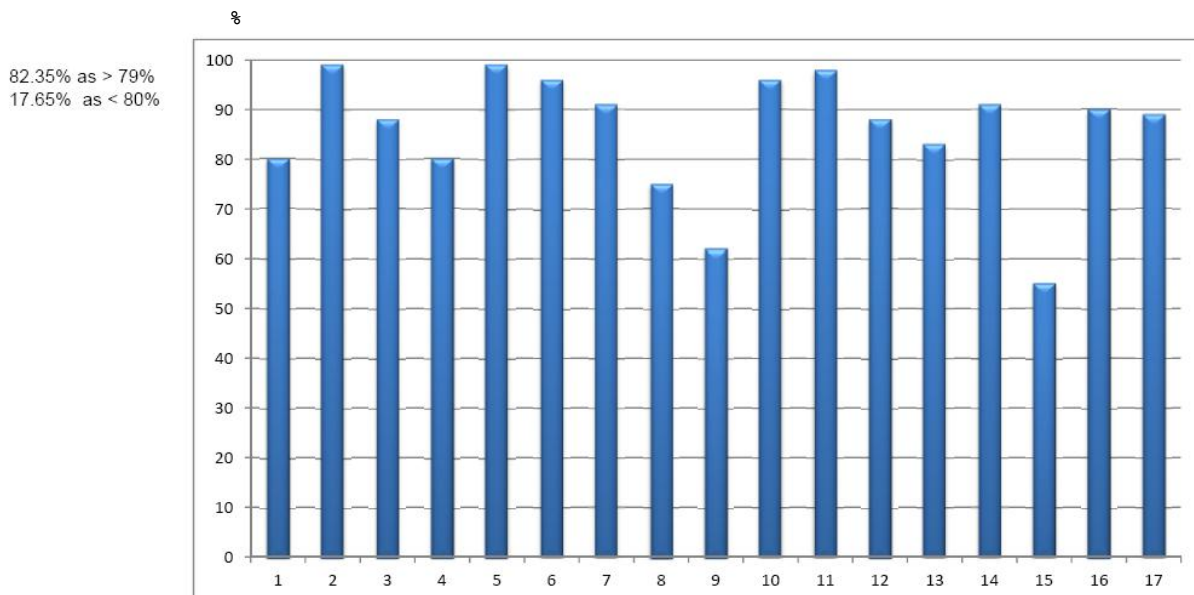


Chapt. 3 ELEC 200 TA Lab Log Progress Report

TA: Philip B. Alipour

General Log and Notes:

- Session Started at 6:30PM and ended at 9:50PM with last students left waiting to be marked on their lab performance.
- All 17 Students were present.
- As I have asked from the last leaving students of this session, whether they like to attend at 5:30 instead of 6:30, all agreed, so they could finish up an hour sooner than scheduled. It seems there are no labs during this hour. Of course, those students that have classes must object this, but if all unanimously agree by not responding to this email, we then could start the lab at 5:30. This requires indeed the course instructor's approval by responding to this request in due time.
- Computer Station # 09 in ELW 307 was again not letting any user to log onto it. I have reported this to the maintainers/administrators of the network. I shall further check this next week when I'm present in the lab to collect the reports before submission deadline.
- During attendance, previous marks were handed out to students and a person-to-person communication occurred on the written comments made in their reports to clarify points for their next lab, in aim of receiving better submissions, avoiding mistakes by addressing such comments.
- The following chart shows the average performance of students from their previous lab including reports. **Note:** These are the final grades unless a valid objection is noted on the grade, thereby contemplated for a change to a higher, none, or lower grade.



- All 17 students have passed! Those with exceptionally excellent marks after all 4 sessions, averaging a grade $\geq 95\%$ will be recommended to the course instructor to grant a total of 20% from the ELEC 200 course due to their good performance fulfilling lab objectives in person and thus all expectations on their reports plus hard-work demonstrated to the TA during the sessions. The ultimate grading scheme for the total 20% would be based upon $x = (\text{Average of Labs in percent} * 20) / 100$.
- Those who have worked hard and productive + being creative in using SolidWorks tools interactively, received an extra 5% (assessed and assigned by the TA) out of 25% of the labwork in aim of guaranteeing 5% of the 50% results criteria (see Lec07 notes).
- Further, it was/is asked for **a perfect report structure and content**, a combination of the report structure stated in the lab manual as well as Lec07 notes, to begin the report with an overall **objective** and **introduction**, since a proper report with a conclusion, is to have such components intact. Some students were considerate enough to include this in their reports. In general, a question for this session is to be answered in the introduction in terms of: **"what is the role of assembly in the industry and thus the engineer using this tool to satisfy aspects of design and production?"** Of course, students are free to add anything relevant to this context or similar contexts of this session describing industrial/engineering roles related to their lab material.
- Most reports had clear English grammar and few mistakes, with good **quality and clarity** (commented as **q & c** each 15% mentioned in the report), and as asked some submitted the electronic version of their results with improvements to gain extra marks. One or two instances have had a professional/academic way of writing their reports, short but pointing out key tools, problems and solutions, discussions, etc.
- The marking criteria were generally explained and students have their comments available to produce better results as expected for next time.

Notes for the Attending Students on the forthcoming lab sessions:

- Remember to finish off before your deadline on the session as occurred, last night, Oct. 15th 2012. The report submission deadline is on Oct. 22th, 6:30 PM. After this hour and minute, any submission is deemed as late thus receiving a penalty of 25% per day. Meaning that after 6:30 PM, either hardcopies being dropped in the dropbox or submitted in person, 25% is reduced out of 100% on chapt3 session (excluding the bonus mark distributed on your total mark).
- Bad, unreadable printouts, pixelated drawings with tiny font display on measurements in your hardcopies attached to your report next week, are strongly discouraged and could result in no marks on your work! It is your sole responsibility to work out the drawing tools on e.g. scales on generating a readable *.pdf file (printout) before submission (say, have your parts being generated in a 4:1 ratio now producing a tiny font on a 2:1 multiple-drawing views sheet?)
- Relative to our discussions made during the session, in particular comparison of manual and SolidWorks drawing techniques: highlighting

certain notions e.g., were your manual drafting had less accuracy in pinpointing and sectionalizing hidden lines compared to SolidWorks?

- o Did you approach a design and measurement problem in some other way compared to the report or TA hints? If so, what problems you encountered, and did you correct them? How? Was the software useful to you compared to a manual approach or did you find it monstrous?
- o Put such questions and probably answers addressing/discussing the issue in a simple double-column table in terms of **pros and cons** as specified in your lab manual. List as soon as possible before you forget last night events.
 - Further, how could you solve a drawing print, import, rotation problem, would it be through e.g., tutorials via SolidWorks help menu? Or is the program inflexible? How would you mitigate this?
 - One of the cons was mainly experienced during mating the two tutor parts, one part imported without allowing the user to rotate, but reimporting the part, loosens the lock on it (default fixation made by the program made? Why only on this part?). Is this a bug or there are new ways to address this issue? Should this be reported to the programmers of the program.
 - What about rotations of the part relative to its plane Top, Front or Side view where it was initially created? Did it produce tilted-estimated measurements due to initial finalization of the part(s) during assembly? Well... I find this as a con when a part is created and not adjusted to its truly expected isometric/trimetric view and/or other views. However, it is also a pro when it comes to simulation steps in the assembly, since such rotations are recorded as a mechanical motion of the object. You may find this persistence in finalizing the parts as a saved file with a rotation, relative to its plane of creation (base), in fact pretty useful in very complex designs e.g. a robotic arm, car pistons, etc.!
 - Such issues should be pointed out within the relevant section(s) of your report. Be creative and down to the point!
 - Avoid repetition of an issue in your report, since I will spot them, and it won't get you extra marks. In fact could even reduce your overall mark!
- For more missing information expected to perfect your results and report, refer to your previous lab-log, and naturally, current comments made on your report(s)?

Have a productive week,

With best regards,

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