Protocol for Administering the Final Exam

Exam Preparation:

- 1. For in-lab exams, setup ten tables so only two students sit at each, facing the TV, and the proctor can see each student's eyes at all times during the exam. Stack all other stools by the DoAll.
- 2. Clean off tables so there is no debris to inhibit the students' ability to write.
- 3. Place signs on the three lab walk-in doors that read "Testing In Progress".

Exam Proctoring:

- 1. Collect DR4 submissions before exam begins and ask students to put away everything except their scientific calculators and writing instruments. Ensure all notes are put away and out of view.
- 2. Students were told to provide their own non-graphing calculator for the exam; if they don't have one, we can supply one from our box of calculators. In the larger assembly hall exam, once we run out of supplied calculators, any other students who need them are out of luck.
- 3. As you pass out exams, tell students to not look at them until everyone has one. Ask students to tell you their last name so you can check it off on the roster sheet as you pass out the exam.
- 4. Instruct students to turn over their exams and begin. Tell them they can detach the Tap and Drill Chart from the rest of the exam for convenience, and they will submit both at the end of the exam.
- 5. Record the starting time and ensure each section is given the exact amount of time noted on the first page of the exam.
- 6. Announce to the students when 60min, 30min, and 5min remain on the exam; try to make no other announcements while proctoring the exam.
- 7. Tell everyone to "*stop writing and turn your exams over in the next 30 seconds*" at the end of the two hour time. If any students don't comply, place an asterisk next to their name (-5pts).
- 8. When you collect the exams, collect their Tap and Drill Charts as well.
- 9. While proctoring the exam you want to be as quiet as possible. If anyone else is in the shop working, ask them politely to stop because there is an exam in progress. I find it best to turn on the large black fan in the rear room so there is a consistent hum in the background which muffles small noises that occur as people inevitably walk in and out of the lab.
- 10. I find it works well to occasionally walk around by the restroom, through the machine side, and observe the students from the Marvel side of the workstations for a few minutes so they don't get comfortable with where you are or how frequently you're watching them.
- 11. If you wish to help grade exams while proctoring, be sure to prioritize proctoring, but it is nice to have something else to do. I will provide a solution key for this purpose. Please make sure the exams are never left out of your sight.

Common Questions, Cheating and Grade Posting:

- 1. During the exam please DO NOT answer questions in which students are asking for definitions (e.g. "what does DFM, SFM, or XYZ mean?") or unit conversions. The exam has been refined so much over the past few semesters that there should be no questions you need to answer. If unsure whether you should answer a question, politely tell the student you can't answer that, and remind them they should do their best to answer each question based on the info taught in the course this semester.
- 2. Students may ask if corrections of the same type of mistake on the DFM question count as multiple points. The answer is yes for independent corrections (e.g. if the tolerance is too large for three different dims on the part, correcting each instance of the error results in 3 points) and no for associated corrections (e.g. if the part has four fillets on its corners, correcting the leader which contains a 4X quantity identifier only counts as 1 point).
- 3. If students need restroom breaks, ask them to turn their exams over and leave their phones on top.
- 4. Some students will try to cheat by looking at others' exams, so watch their eyes carefully. If you suspect someone is cheating, calmly check if the person's exam (s)he was looking at is turned to the same page, and if so announce loudly "please keep your eyes on your own paper or you will receive a zero for the exam and an E in the course". If it happens again, take the student's exam, write and circle a large "C" next to their name, and move them to the woodshop table. Make sure you don't mistake a student looking at their tap & drill chart for one looking at their neighbor's exam.
- 5. If students ask about grades, the finals will be graded after everyone completes the last exam during the normally scheduled final exam slot, and grades are not listed prior to final grades being posted.

Exam Grading:

There are a lot of exams to grade and not much time to grade them, so please help with grading while proctoring, if you can do while without being absorbed in an exam for 3 minutes straight.

- 1. Please perform all grading in red ink, don't correct incorrect answers, and mark wrong answers you can't easily read.
- 2. There is no partial credit for questions on the first five pages unless the key is marked "P.C.".
- 3. Calculation problems are either completely correct or wrong; units must be shown in each step and final answers must be circled.
- 4. TRUE / FALSE questions which aren't corrected are marked wrong and marked with a [©] symbol.
- 5. Denote questions which are wrong with a large "X" to the left of the question; please do not place any checkmarks on the exams, as these make it more difficult to accurately tally points.
- 6. When grading the mfg. outline question, place a slash through any answers which don't match the key; I can tally the point deductions later if you are not comfortable doing so.
- 7. The DFM question is the most challenging, yet most enjoyable problem to grade, as you have to play detective to figure out exactly what they mean ⁽ⁱ⁾. When grading, place a checkmark next to each valid correction and an X next to each erroneous correction.
- 8. If the students didn't already do so, please detach the Tap and Drill Charts for recycling.