EML2322L – MAE Design and Manufacturing Laboratory

Miscellaneous TA Notes / FAQ

This document explains miscellaneous points that are challenging to communicate consistently to TAs from one semester to the next.

1. **Attendance roster.** The attendance roster should be checked for tardiness promptly at the beginning of each lab. The only exception is that we give the early morning (8:00 or 8:30) labs a 15 minute grace period, as busses sometimes run late on their first routes. ***Tardy students should be marked with a highlight across one-quarter of their sign-in block; at the beginning of the following lab students who were absent from the previous lab should be marked with a highlight across their entire sign-in block.*** *For reference, one occurrence is a warning; multiple result in an absence.*

2. **Safety sheets.** Emphasize to the students the importance of bringing their safety sheets to every lab session so they can highlight the most important points and refer to their safety sheets in the future. Students should have their own copy during the training sessions; however sending them to the Reitz Union to print out a replacement copy causes them to miss 30 minutes of their lab, which may not be the best solution. ***If students don't have their safety packets, give them a lab copy to use, write "SS" next to their signatures in the roster and instruct them to print a new copy for the following week's lab.*** *For reference, one occurrence is a warning; multiple result in a grade penalty.*

3. **Shoes and pants.** Proper footwear and pants are required by our department, so there can be no leniency here. ***If students don't have proper shoes or pants, write "S" and/or "P" next to their signature in the roster, and instruct them to attend another lab for a makeup and to be proactive about remembering the essential safety items.*** *For reference, one occurrence is a warning; multiple result in a grade penalty.* ***Students must also wear these (and glasses) during the weekly TA hours; if they forget, they must be politely but strictly instructed they cannot remain in the lab.***

4. **Starting and ending work on time.** To be fair to all students taking the course, work cannot commence prior to the formal laboratory starting time. However, students arriving early to class should be rewarded by being allowed to select which machines they want to use once class begins. At the end of each lab session students should stop working with enough time to clean up, put their materials away and leave by the end of the lab period. We should not allow students to work late, as doing so gives an unfair advantage and can impair the next lab group's ability to start on time. ***If groups stay late, politely tell them they need to wrap up earlier in the future and make a note on their progress evaluations.*** *For reference, one occurrence is a warning; multiple result in a grade penalty.*

5. **Noise warnings.** ***When doing anything that makes a loud noise, please call out "EARS!" to students in your area and allow approximately two seconds before making the loud noise(s).*** If you are doing something that produces multiple loud sounds in short succession, it is only necessary to call out *EARS!* the first time to alert others in your area.

6. **TA meetings and training sessions.** TA meetings are crucial for ensuring everyone can perform well during the weekly activities and function as effective instructors. One of our biggest challenges is trying to instruct all students the same way and provide the same answers to factual-based questions related to the course. Unfortunately, the department views TA meetings as preparation to do the job for which you are paid, and as such, does not want you to bill this time. ***To keep our mandatory TA meetings as short on concise as possible, I need every TA to earnestly read each week's TA notes and review the linked documents therein before arriving to the weekly TA meetings.***

7. **Order of importance.** Some students are just difficult to work with and teach, despite our best attempts; for these cases it's helpful to understand the order of importance to place on what happens in the lab. ***Ranked from highest to lowest order of importance:***

    A. student's personal safety
    B. equipment and facility respect
    C. care for student's feelings
    D. desire to teach students what we know

8. **Billing hours.** Since TAs serve in many different capacities, it's important to understand when and how to bill hours. TAs which have been added into the payroll system should bill hours using the following rubric / payrates:

PAY RATE	TASK DESCRIPTION
0.0	attending TA MEETINGS you are not leading
0.5	reading TA notes and course materials to prepare for labs you teach
0.5	training on equipment in preparation for teaching (i.e. during TA meetings)
0.5	shadowing an older TA in preparation to teach a later lab
0.5	working on TA projects on which you are learning new skills (i.e. learning how to TIG weld or program a CNC for the first time)
1.0	teaching normal labs, office hours, student shop, or shadowing newer TAs
1.0	working on TA projects using skills with which you feel proficient
1.0	performing homework or report grading, or meeting with a class group
1.0	cleaning lab, performing equipment maintenance
1.5	working unusually busy office hours or student shop hours
1.5	leading TA training (i.e. leading a mill or lathe training group)
1.5	creating new course docs or making substantial contributions to existing ones
1.5	working on projects using skills most course TAs don't possess (i.e. TIG welding, CNC machining, machine troubleshooting and repair, etc.)
1.5	working late (after 6:00pm) office hours
1.5 [1]	making IPPD or Senior Design parts (manual)
1.5 [1]	making IPPD or Senior Design parts (welding)
2.0 [1]	making IPPD or Senior Design parts (CNC)

[1] indicates payment source must be setup with Mike & payroll prior to performing work

Billing hours (continued). When entering your time in the PeopleSoft payroll system, it is very important you properly label each type of work you perform:

a. ***In-Lab Support*** (any time you are assisting in lab)
b. ***Exam Grading, Homework Grading, or Project Grading*** (exam grading refers to final exam grading; homework grading refers to homework grading ☺, and project grading refers to time spend grading project design reports)
c. ***Student Shop*** (any time you are working or shadowing in the Student Shop)

10. **Scheduled hours.** With so many TAs necessary for training, teaching labs, running the student shop, working on lab / shop projects, and assisting with grading and administrative work, it's impossible to grant everyone the perfect balance of desired hours and tasks. But we try VERY hard. If I ask you to do something you didn't request, please try it and if you don't feel it's aligned well with your personality, talk with me about it and we'll figure out a solution. If I ask you to work too many hours, please don't be afraid to tell me and we'll make an adjustment. And if I didn't give you enough hours, please speak with me and we will make a change to the schedule or you can pick up additional hours by assisting with other important tasks, such as:

    a. facility or equipment maintenance in lab or student shop
    b. homework grading
    c. new TA training
    d. lab or shop improvement projects
    e. improving or assisting creating new course or TA materials
    f. assisting preparing the following semester's design project

11. **Students fainting.** On occasion a student will feel light headed or even faint from lack of blood sugar or another medical condition. If this occurs it's typically during the first few weeks of the semester, so ***please be vigilant and move close to anyone who seems to be acting oddly or who appears dazed.*** We have to watch out for this and proactively ask anyone who doesn't look good if (s)he is feeling okay. In these cases, please escort the student to a chair in the office or on the worktable side of the lab in case they start to fall. We can offer the student some water and a snack, and if (s)he doesn't feel better after 15 minutes, we should offer to escort them to the infirmary or they should call a friend to give them a ride

12. **Informing Lab Manager of problems.** ***When something doesn't go right, it's important to inform the Lab Manager so corrective action can be taken*** (documentation or training improved, replacement item(s) ordered, etc.). Examples include a mishap on the Marvel (i.e. spinning a 2″ lab drop) that may have damaged the blade, a welding helmet that's damaged during a demo, a broken project motor, etc. Please report anything out of the ordinary in person if at all possible, or on the Google Sheet until you have a chance to speak about it in person.