EML2322L – MAE Design and Manufacturing Laboratory

What Makes a Good TA?

In pursuit of the best learning environment we can create, I compiled a list of what makes a good TA for the lab. Please forward suggestions for other points.

1. **Be enthusiastic.** No one else will be interested in what you're teaching if you aren't.

2. **Be serious.** If the students see you joking too much early in the semester they will think it's okay for them not to take the course too seriously either. Please remember you are paid to be their instructors, not their friends. If students see you texting during lab they'll think it's okay for them to do the same, so don't do it. Set a professional example.

3. **Be organized.** Always tell the students what they will do each lab. Do the same during the training. For example, if you tell them they are going to take turns touching off on the workpiece, setting the part zero and machining off a specified amount, they will pay more attention for the next few minutes while you demonstrate how to perform those steps.

4. **Remind students what they should be doing to be prepared for the next lab.** The students have the course syllabus and project schedule, but with so many weekly assignments, it's helpful to remind the students exactly what they should complete and bring to lab the following week. This is the best time for students to ask for clarification on tasks they aren't clear about. You can always find a list of each week's deliverables on the main page of the course website and in the TA notes for reference, so review this list with your group at the end of each lab to make sure you don't forget anything.

5. **Be honest.** If the students are behind on their weekly assignments, did a poor job on their design reports, or aren't working efficiently in the lab, tell them. Be honest with them, as direct feedback is what they need to modify their behavior. If you act like everything is okay, they will think it is too and not realize they are behind. Balance this by <u>always providing constructive criticism in a calm and respectful manner.</u> If the students do not heed your feedback then time will be their teacher, so don't get frustrated. Again, balance is the key.

6. **Never insult students.** It is okay to tell the students their idea might be flawed as long as you explain why, but don't insult them by calling their ideas foolish or dumb. You can disagree with their designs, but only if you offer constructive criticism as to why you don't think they are good ideas based on previous observations made working in the lab. No matter how helpful you try to be, it won't matter if the students become defensive because they feel insulted or that you are being condescending, so again, balance is the key.

7. **Speak slowly, clearly and to the point.** Don't talk just to talk. Silence is okay. Make your point and move on. If students hear too much information, they get overloaded and don't know what's important, so place quality over quantity. Learn to avoid annoying vocal mannerisms, such as *like, um, uh* and *okay,* as they make us sound less intelligent. As stated previously, silence is not bad, so mix a good balance in with your talking.

8. **Have a strong command presence.** Command presence is presenting yourself as someone in authority, who can be trusted and should be respected; this is conveyed by how you look, act, and speak. Always strive to achieve a strong, yet pleasant command presence.
    - Take pride in how you look and sound: teach with your head up, eyes alert, and expression intent, and speak with good volume, projection, enunciation, and speed
    - Walk with energy and purpose; don't use a lazy walk or appear apathetic
    - Make routine eye contact with the students to better engage them personally
    - Avoid standing rigidly in place; move regularly but with purpose
    - Project confidence through your body language as you interact with others; use hand gestures and body movements to complement your speech
    - Avoid fidgeting and other habits that detract from your command presence by making you look unsure, nervous, distracted, or disengaged
    - Keep your hands out of your pockets to avoid appearing apathetic or uncommitted
    - Remember that first impressions are lasting and set the expectation for future interaction

9. **Inspire confidence with your knowledge.** Having a strong command presence cannot make up for a lack of knowledge on the course assignments, procedures, and due dates. Make sure you are familiar with EVERY detail of the design project, EXACTLY what I'm asking for in the design reports, ALL answers to the homework questions, and that you review the weekly deliverables on the course website or in the TA notes so you can confidently remind the students what they should do each week and when assignments are due.

10. **Arrive 5 minutes early to lab.** NEVER be late, as doing so completely undermines our attempt to enforce labs starting on time; if it's unavoidable, call and let me know so your delay can be addressed in a professional manner ((352) 225-1619).

11. **E-mail your group if you run short on time explaining the weekly deliverables.** Sending your group a short e-mail elaborating on the weekly deliverables can often make a group feel you sincerely care about their understanding and success in the course.

12. **Don't use lab like a study hall.** Just because your group isn't asking for help doesn't mean they don't need it. Many students are intimidated by everything they must consider to successfully solve the design problem. Don't just sit at a lab table and expect the students to come ask you questions. **Care about your group's success.** Ask what they are doing and if they have questions; look at their designs and ask how they will manufacture various parts; offer suggestions for modifying their designs or manufacturing methods to save time; check if we have the raw materials for manufacturing their parts; etc. If you do this and your group still does not want your help, find a group that does. Please remember you are being paid to TA, not to study during the labs. It is okay to sit for a bit after making the rounds, but you should not spend 20+ minute intervals at the TA table doing nothing to help the students.

13. **Have fun.** Hopefully one reason each of us is here teaching is because we enjoy doing so. Each lab you teach is a chance for you and the students you interact with to step away from the mundane happenings on the rest of the campus into an encouraging and exciting environment that reminds us all that learning is fun. Labs like this are unfortunately rare in collegiate circles, so embrace the opportunity we have been given to make a difference while having fun!