

## EML2322L – MAE Design and Manufacturing Laboratory

### What Makes a Good Mentor TA?

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

1. **Be patient and encouraging.** We are asking students to become instructors and improve not only their knowledge but also their skills at a highly accelerated pace. These mentees are allowed to stumble and make mistakes, but we are always seeking continuous improvement.
2. **Be serious.** This is your job and this is now your mentee's job; if you are joking too much early in your friendship they will think it is okay to not take their role as a TA as seriously as they should. You should of course have fun together, but please prioritize being their mentor.
3. **Be organized.** Always take a few minutes to write down a few notes you want to share with your mentee before you meet.
4. **Have a strong command presence.** If you don't, how will they? You know by now how important this is to allowing students to trust what we have to share with them.
5. **Arrive early to each meeting.** NEVER be late to meetings with your mentees, as doing so undermines their confidence that you are trustworthy and passionate about your role. If it's unavoidable, please call and let them know so at least they are not left waiting and wondering.
6. **Inspire confidence with your knowledge.** Having a strong command presence cannot make up for a lack of knowledge on the course assignments, due dates, procedures, and training materials. Make sure you are familiar with EVERY detail to the best of your ability so you can confidently answer questions mentees ask.
7. **Provide honest and respectful feedback.** Few of us start off as great instructors. We need honest and respectful feedback so we know where we can improve and how to go about doing so. If you always act like everything is great, your mentees will think it is too and not realize there are areas they need to improve so they can become better, and eventually be great.
8. **Remind the mentee what they should be doing to be prepared for the next lab.** Every TA should review the project schedule, course deliverables, and homework solutions weekly, but with so many assignments, it's best to remind the mentees exactly what is coming up the following week. This is the best time to ask for clarification on tasks they aren't clear about.
9. **Use each opportunity you have to mentor your mentee.** Just because your mentee isn't asking for help doesn't mean (s)he doesn't need or want it. Please try to remember what it was like your first semester, and the help others gave you so could learn, feel you fit in, and grow your confidence working as a TA in what can be a very intimidating environment. Please consciously invest in your mentees and help them grow into the strong, exceptional TAs we believe they can be!

10. **You are not solely responsible for your group's success.** Let your mentees know we want them to feel invested in each of their group's success, but (s)he alone is not responsible for that success. If the group listens to and acts upon the advice (s)he offers, their chance for success should grow immensely. If the group doesn't listen to our advice or invest the time to complete the weekly assignments, they are responsible for their failures.
11. **Realize not every mentee will turn out to be a great TA.** As much as we collectively should want each new mentee to turn into a great TA, that will not be the case with every student. If you feel there are issues that are not improving as you provide clear feedback, please do not wait to get me involved so I can help coach them and when necessary, find a replacement so what we each work so hard to achieve is not diminished by having the wrong types of TAs in the lab.
12. **Focus areas for mentoring.** The following list contains the main areas where the mentees will need clear direction and feedback from their mentor TAs:
  - a. **Command presence.** Demonstrating a strong and serious, but compassionate command presence is not an easy balance. Reiterate the importance of command presence to inspiring trust in the students. Tell your mentees from the minute they step into the lab each time, their command presence (whether good or bad) is on display. So they need to watch their body language as well as their oral language. They cannot just blend in; they must show caring, yet structured leadership.
  - b. **Equipment training.** Again, strong, serious, but compassionate command presence. Clear and concise instruction with safety always at the forefront.
  - c. **Assigned parts.** Same focus as for equipment training, but now mentees have to work on speed, as they set the pace for their groups. If someone in their group is faltering because of laziness, they need to pull them aside and give them a motivational talk. If someone in the group is faltering because of understanding, they need to pull them aside and request they come into the office hours (or meet with them individually) for additional instruction.
  - d. **Delivering weekly reminders to groups.** Mentees must be familiar with the weekly reminders, and deliver them in a way that the group cannot come back in and say, "oh, we didn't know that was due." Mentees must also give the groups an idea of the more difficult assignments so they know now to procrastinate and think they are going to complete DR2 in a four hour meeting together the evening before it's due.
  - e. **Design report grading.** Grading is difficult, even for the most senior TAs. Teaching the mentees how to grade so they are consistently using the checklist, but assigning point deductions in a reasonable and compassionate manner is a challenging skill to teach.
  - f. **TA Training Checklist.** Inquire about weekly progress on their knowledge and skill building checklist, and reinforce how important and helpful those skills are for teaching in the lab and the Student Shop, as well as working on more advanced projects (which add to their portfolios and help secure internships). If they miss a New TA Training session, please makeup the training with them if possible.
  - g. **Office hours.** Explain the interaction we want students to have with TAs during the office hours (we want to facilitate their learning, answer every question, provide direction, help build prototypes, and reinforce the skills taught on the class assignments, but we don't want to give them design ideas we think are the best for the current project).