

Suggestions from Mike & the TAs

1. **Read effectively.** *Actively scan* documents for general information prior to reading the detailed content (especially headers and the first sentences in paragraphs). This gives you context for understanding and allows you to skip sections that are not pertinent. Additionally, ***read sitting upright and when you are most alert.***
2. **Don't procrastinate.** It's easy to underestimate the time commitment for this course. The course really starts off at a fast pace, increases even more until the time the third design report is due, and then slacks off—the exact opposite of other courses you have taken. ***Be proactive to stay on top of the assignments*** so you don't become overwhelmed.

Regarding manufacturing, ***create an accurate yet aggressive project schedule.*** If you don't work at an aggressive pace, you will not have adequate time to test your designs at the end of the semester. There are no additional work times available outside the assigned lab periods.

3. **Find a balance between quality and time invested.** In the beginning of the course, the TAs work with you to make two parts with high accuracy and good surface finish to show the full capabilities of the equipment. However, ***most part features do NOT require high accuracy or good finish!*** This is one of the primary roles of the part designer: to determine how good either of these must be. ***Use larger tolerances and looser surface finish specifications whenever possible to reduce manufacturing time.***
4. **To receive good advice, ask good questions.** The TAs have seen lots of ideas succeed and fail; their job is to stimulate discussions so you can generate a list of pros & cons for the decisions you will make, not to make the decisions for you. ***TAs will match the level of effort you invest in the project.*** For example, asking a TA *how to mount a wheel to a motor* will generate little response, since this is a topic directly covered lecture. However, asking a TA *if a particular design you sketched is a good idea, or of sufficient thickness, or a wise material choice* will elicit a helpful response. In short, ***if you act helpless, the TAs will too.*** The TAs are a great resource, but you must approach them with specific questions which show you used the provided course resources.
5. **Apply what you learn in this course to your career choice.** If you don't find the course interesting and challenging, if you have problems working effectively in a team, or if you have trouble comprehending the fundamentals taught in this course, you probably should not pursue a job in engineering design. Figuring out what you don't want to do is every bit as important as discovering what you do. You will be working far too many hours each week for many years to not do something you are truly passionate about. Despite how much money you make, it cannot make you happy if you don't like your job! ***Mike came to UF and started this laboratory for the primary purpose of helping students find their passion. If you aren't yet sure what that is, he invites you to talk so he can help. Everyone has talents and gifts; however, finding the right type of job that uses them can be challenging!***