

Assemblies and More CAD Models

ME 170 CADLAB#8 and TEAMPROJ#7

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UIUC

Fall 2022



A reminder:

- Office Hours (MEL 1009):
 - Tuesday Noon-1PM MEL 1009
 - Wednesday 9:30-10:30AM [Zoom](#)
- CADLAB#8
- TEAMPROJ#7

If you have questions on CADLAB, you should plan to visit office hours - email is not an effective way to solve issues with CADLAB problems.



- CADLAB#6
- CADLAB#7 - Detail Drawings (Due 10/19 Wednesday)
- CADLAB#5 - Photo Submission (Due 10/26 Wednesday)
- CADLAB#8 - Assemblies (Due 10/26 Wednesday)
- CADLAB#9 - Mechanism Design & Animation (Due 11/2 Wednesday) - Last CADLAB!

CADLABs 1-4 have been graded. If you don't have a grade for one of these and think you should, you need to contact the grader and I ASAP (Friday 10/20). You also probably need to fix the sharing problem.



- TEAMPROJ#5
- TEAMPROJ#6 - Start CAD Modeling (Due 10/19 Wednesday)
- TEAMPROJ#7 - 50% CAD Models (Due 10/26 Wednesday)
- TEAMPROJ#8 - Assembly Modeling (Due 11/2 Wednesday)
- TEAMPROJ#9 - Engineering Part Drawings (Due 11/9 Wednesday)
- TEAMPROJ#10 - Engineering Assembly Drawings (Due 11/16 Wednesday)



CADLAB#8: Assemblies



CADLAB#8 Goal

This week's CADLAB you will learn to make assemblies from the parts that you created and then drawings from the assembly. It can be a bit of work to get it right.

This is where you find out how well you followed the directions!



- If parts don't fit, you have probably made an error in an earlier drawing. You will need to figure out why it is not working.
- As you make assemblies, you may find that you need to rotate objects to have the correct orientation.
- The exploded view can be quite tricky to get right. Takes a lot of adjustment and re-adjustment.
- As with CADLAB#7, try to make the final drawings as similar to the provided drawings as possible.



TEAMPROJ#7: 50% CAD Models



This week you will need to finish modeling at least three more parts for your Team Project (for a total of five parts). I don't know how many parts you will have in the end, but I want to see progress.

I **highly** recommend that you aim for more parts.

- Make sure to place your three new drawings that you want graded in a folder named "Team Project 7".
- You are welcome to put in more than three, but I will grade all of them.
- You will be graded for similar issues as your CADLABs

You should have a good idea of all the parts in your project at this point and will be expected to have all of the parts complete for TEAMPROJ#8 (Due 11/2)



While number of parts is not the sole indicator of a good project, it is often the case. A good rule of thumb:

- Less than 10 (unique) parts - probably not complex/challenging enough.
- About 15 parts - good spot to be.
- 20 or more parts - I worry about you being able to finish your project.

If you think you are going to have trouble with this, please talk to me early.



- CADLAB#7 is due October 19 at 11:59PM
- CADLAB#8 is due October 26 at 11:59PM
- CADLAB#5 Pictures are due October 26 at 11:59PM
- TEAMPROJ#6 is due October 19 at 11:59PM
- TEAMPROJ#7 is due October 26 at 11:59PM
- Start preparing for CADLAB#9
- Start preparing for TEAMPROJ#8



- Ben Walt - walt@illinois.edu
- Graders:
 - Monday 1-2:50PM (AB1) - Aryan Shroff - aryans4@illinois.edu
 - Monday 3-4:50PM (AB2) - Patrick Li - pyli2@illinois.edu
 - Tuesday 1-2:50PM (AB3) - Nishesh Arora - nishesh2@illinois.edu
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