Homework submission requirements and guidelines

ME 274 – Spring 2025

Homework submission requirements

- Each problem must start on a new sheet of paper.
- The format for each problem must follow that which is provided on the following page. If you use multiple sheets of paper to solve a problem, repeat the *DATE*/*PROBLEM NO.*/*PAGE NO.* and *NAME* header on each sheet.
- Before scanning, put the pages for the two questions in order and scan from the first to the last sheet of paper.
- After scanning, the pages should be assigned to the correct questions within Gradescope.
- The homework submission is due by 11:59PM of the due date. You may submit your homework by the *LATE* time of 12:00 noon of the following day, but at a 50% loss of points. DRC students who are permitted extra-time accommodations are able to submit homework by this *LATE* time without loss of points.
- Plan ahead in anticipation of possible technical hiccups in submitting. Plan to complete and submit your homework several hours before the due time. If technical issues prevent you from submitting by the due time, email this submission to the lead TA prior to the due time. Any submission arriving in Gradescope or to the lead TA *after* the due time will be counted as *LATE*, regardless of the reason.
- Your writing needs to be large enough so that when the problem is scanned, it does not require the grader to do high levels of magnification to be able to read your solution. You need to use a sharp pencil that is on the soft side (HB at a minimum) so that the writing is dark enough so that the scan works well.
- Before uploading to Gradescope, check the quality of the scanned problem. You do not want to lose points because the grader is unable to read your solution. If it is hard to read, you need to rescan and make sure the result is better.
- The correct vector notation in this course for homeworks, quizzes and exams is that using unit vectors; e.g., $\vec{F} = \left(10\hat{i} + 20\hat{j}\right) lb$. Do NOT use the "bracket notation" for vectors such as $\vec{F} = \langle 10,20 \rangle \, lb$. Usage of the bracket notion in your vector answers can lead to a loss in points.
- You must specify coordinate systems, associated references points, draw the unit vectors that you are using on the diagrams, and include units in your answers. For kinetics problems, you must include clear free-body diagrams. Failure to do any of these things will result in a loss of points. Failure to do all of these things will result in a large loss of points.

Homework grading

You will have two homework problems assigned per class period. One of the two assigned problems will be graded in detail, with a maximum of ten points per problem. The other assigned problem will be graded only for completion and not for correctness - four points will be awarded for a completed solution of this problem.

DUE DATE *(month, day, year)* ***PROBLEM NO.*** *(H#.#)* ***PAGE NO.*** *(# of #)* ***NAME*** *(last, first)*

***Given*:** A concise statement (in your own words) of the information given.

***Find*:** A concise statement (in your own words) of the information sought.

***Solution*:** **Sketch the system** to be studied. USE A STRAIGHT EDGE for drawing lines. Always draw in the UNIT VECTORS for the coordinate systems that you use in your solution.

For kinetics problems, follow the four-step plan:

1. Draw FBD's
2. Write down the fundamental kinetics equations (Newton/Euler, work/energy, linear impulse/momentum, angular impulse momentum equations)
3. Kinematics
4. Solve

Work the problem symbolically.
At the end convert all quantities to a consistent set of units and substitute into the equations to obtain the answers.

Check your answers for correctness and feasibility.

Check your vector notation and units. In particular, check that you are not equating vector quantities to scalar quantities. It is important that you demonstrate that you know the difference between scalars and vectors. So pay attention to your notation.

Label the answers._____ANSWER