

CME 192: MATLAB for Scientific Computing and Engineering

Assignment 1

02/09/2026 - 02/23/2026

Instructions

This assignment is designed to reinforce the concepts covered in class and apply the appropriate MATLAB tools in context. You will modify three provided livescripts, each corresponding to a different set of topics from lecture. In each livescript, you are expected to follow the existing structure and comments, identify which MATLAB functions or capabilities are needed, and fill in the missing lines of code. The emphasis is on recognizing when and why to use particular MATLAB features, not on writing code from scratch or introducing new ideas.

This being said, certainly feel free to delete the code scaffolding in the livescripts and write your own solutions to each of the tasks! As long as your code has similar functionality, you will receive full credit.

You will submit the completed livescripts as your solution to gradescope.

Question (b) in the PDE section (part 3) has been made bonus, since it requires some knowledge of PDEs to understand what is going on. Part 4 of this assignment is also bonus! It is on animations and I will showcase the results on our class website! Both of these bonus exercises are for extra practice and exploration, but not required for full credit.

On-Ramp Certification

Students who completed the MATLAB Introductory on-ramp certification (specified in syllabus) are welcome to submit that in place of Part 1 of this assignment.

Due Date

The assignment will be due on Monday, February 23rd 2026. Please don't hesitate to reach out about any questions or concerns you have for this assignment. As mentioned on the syllabus, I am happy accommodate if you have competing deadlines or extenuating circumstances: please submit any requests for extension via the google form:

https://docs.google.com/forms/d/e/1FAIpQLSce2qZ0aSm17rJGJDIGuEqB_hmff-bSjLhSg6jt1LQqUU7C3Q/viewform

Assignment Policies

We follow the official Stanford policy on generative AI:

<https://communitystandards.stanford.edu/generative-ai-policy-guidance>

If you use AI in your coursework, please make a note of it whenever you do so. You will not be penalized.

Group work is permitted and strongly encouraged! Any group size is permitted. I only ask that you upload your own submissions to gradescope.