

## NE 155

### Code Final Project Rubric

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The final paper should be  $\sim 6$ -7 pages per team member. Please include these items in the final report:

1. **Introduction:** What does the code you wrote do? Also preview what you are going to talk about.
2. **Mathematics:** Write the continuous and discretized equations that you are solving, defining all terms. Include any derivations needed to reach discretized equations as applicable.
3. **Algorithms:** Include the algorithms that you implemented in your code.
4. **Code Use:** Describe how to use your code, including inputs needed and output expected.
5. **Test Problems and Results:** Describe any testing you did to demonstrate your code is correct and present any results from test problems.
6. **References**

You must submit your code and at least one example input and corresponding output (I strongly encourage you to version control your code and submit access to the repository). Part of the project grade will be based on whether the code executes properly.

Your mid-project report should replace Test Problems and Results section with **Plans for Completion**, keeping in mind that these plans should include plans for what tests/inputs you will give to your code. The first three sections don't have to be completely polished, but they should at least be very solid drafts. I will provide feedback, so the better they are when I read them the more useful the feedback will be. This should be up to  $\sim 4$  pages for one person and  $\sim 7$  pages for two people (varying depending on compactness of mathematics, algorithms, etc.).

Please include these same items in your final presentation. For projects with one person, aim for 8 minutes and projects with two people aim for 14 minutes. Part of the final presentation should be a code execution demonstration.

I will use the following rubric for evaluating the paper:

Category	Possible Points	Earned Points
Math, discretizations, and algorithms are correct	12	
Code input, output, and tests are well-designed	12	
Work implemented correctly	10	
Appropriate logical flow of paper	3	
Complete sentences; correct grammar and spelling	8	
Sources properly documented	5	
Total	50	

This rubric is for evaluating the presentation:

Category	Possible Points	Earned Points
Explanation of implemented code (math, discretizations, algorithms) is clear	8	
Code demonstration works and is understandable	8	
Good presentation skills: eye contact, volume, clarity of slides, etc.	6	
Appropriate presentation length	3	
Total	25	