Bioen 485/585 Lab Report Expectations and Grading

Lab Report Expectations:

We do not require a formal lab report; instead, your solution needs to comply with the following checklist. Most students find it convenient to create a single document in a program like word, into which they can insert text, figures copied from the software, and pictures or scans of their handwritten diagrams and equations as they go. In order for the TA to efficiently give you credit for your work, it is essential that your submission be easy to understand. Upload a single document (pdf is preferred) to the Canvas site under the assignment for that week, that includes your answers to the questions each week.

CHECKLIST:

1. Include the question numbers/letters so we can find your answers.
2. Show your analytic work: Include your diagrams and analytic calculations and equations. You are equally welcome to use software programs to format these, or to scan or photograph handwritten material, as long as your solution is legible. If you use symbolic math software to solve analytic work, then describe your input, output, and method.
3. Show your numeric work: include figures, complete with axes labels, titles, legends, and captions as needed to explain what they show. Make sure all labels in the figures are large enough to read when your document is viewed at scale.
4. Read over the assignment to make sure you answered all interpretive or conceptual questions as well as the quantitative questions.
5. Even when we don't ask, you should verify your work, especially if your intuition raises questions about an answer. If you have analytic or numeric errors that should have been caught by the verification tools we teach, we expect you to identify the issue and fix it if possible.
6. If we ask you to interpret a result, you must use the descriptive words (not just variable or parameter names) so that your answer would make sense to someone who has not seen your formulation of the model.
7. Include your software code as an appendix (MATLAB) or as a figure (SIMULINK) when possible, or as a separate file if all else fails.

These labs are intended as a learning tool, not an assessment tool, and so will be graded very leniently, essentially for participation and completeness. For this reason, do not assume a good grade means you understood everything – you need to read the instructor's comments on your submission. That said, completeness includes performing the verification steps, so small numbers of points may be subtracted for errors that should have been caught if you don't report how your verification identified that this result was wrong. In other words, you will get full credit for knowing your answer is wrong even if you can't fix it, but not if you say "it's different from everyone else's answer". Instead, you need to say "I realized after I solved the whole thing that the units don't match" or "the solution was different with every method I tried, so I doubt all of them."

(We say 'may' because it's hard to quickly determine which mistakes should have been caught when grading lots of assignments.)