

Instructions for Programming Assignment

- You may work alone or in groups of 2 people. I am opposed to groups of three or more.
 - ✓ Contact the TA if you are having trouble finding a partner.
 - ✓ A team consisting of one person who is a bit stronger in math with one who is a bit stronger in programming is best.
- Except in extraordinary circumstances, both members of the group will receive the same grade, but your report should indicate who did what.
- You may use MATLAB for the assignment, or some other language with permission of the TA.
- You must cite the source of any software that you do not write yourselves.
- Your programs (and the reports) should clearly indicate authorship of the code and also should cite any libraries that you use, including source.
- Do not go out and try to find a package that solves this particular problem. Numerical libraries are one thing, but using someone's registration or calibration code is entirely another matter.
- Note that these rules are intended to supplement the general instructions discussed at the opening session of the class, not to replace them. If you have questions, see me or the TA.
- You should hand in a **PDF** with the following included:
 - ✓ A narrative report summarizing:
 - The mathematical approach taken.
 - The algorithmic steps followed.
 - An overview of the structure of the computer program, sufficient to enable someone with reasonable skill (the grader) to understand your approach and follow your code.
 - The steps taken to verify that the program is working correctly. Typically, this would take the form of a discussion of the results using the debugging examples.
 - A tabular summary of the results obtained for unknown data
 - A short discussion for the results of running your program. This certainly includes the tabular summary above, but may also include a discussion of convergence if you adopt an iterative process or of difficulties if you suspect that your answer is wrong.
 - A short statement of who did what.
 - ✓ A well-structured and well documented program listing
 - ✓ The final submission to Canvas should be a ZIP file containing:
 - The PDF file for your report.
 - A directory called "PROGRAMS", containing (at least) all source files for your program, together with a file "README.TXT", containing the names of all the source files, together with a 1-line description of each file. You should **also** include an executable program and instructions for using it ("main.m" for example). For this, you should place a copy of the input data files in a place that your executable program can reach it when we copy your PROGRAMS directory to a local temporary folder.
 - If applicable, another directory, called "OUTPUT", containing the program output files in the specified format and with the specified name.