Note: Different homework (HW) assignments are worth different total amounts of weights. See the Evaluation link on the course web page for details.

The rubrics below are expressed as percentages of the weight for any one exercise

| Rubric – Homeworks involving | | | |
|--------------------------------|-----------------------------------|--------------------------------|-----------------------------------|
| computer programming | Excellent | Good | Poor |
| Correct Answer (up to 80% of | (80%) All answers are | (10 – 70%) Some answers are | (0 %) No answers are correct, |
| overall grade) | numerically correct, with units | correct. Score depends on | or no HW was submitted. |
| | specified, graphs correctly | portion of answers that are | |
| | drawn, and discussion added | correct, and the difficulty of | |
| | where appropriate. | each question. | |
| Documentation (up to 10%) of | (10%) Very thorough | (1 to 9%) Partially documented | (0 %) No documentation, or no |
| overall grade | documentation within the | within the code. Score depends | HW submitted. |
| | code, with major comments for | on the portion of code that is | |
| | each section of code, and in- | documented, and on the ability | |
| | line comments almost | of the professor or TA to | |
| | everywhere, giving info on the | thoroughly understand the | |
| | processes, variables, units, etc. | code even without knowledge | |
| | Namely, similar or better than | of the syntax of your | |
| | the documentation in Stull's | programming language. | |
| | code fragments on the course | | |
| | webpage. | | |
| Clarity (up to 10%) of overall | (10%) Output provided to the | (0 - 9%) Score depends on how | (0 %) Not clear at all, or not HW |
| grade. See Homework Tips | instructor is neat, clear, and | clear and neat the output is. | submitted. |
| below | well organized. Figures are | The more work the professor | |
| | numbered or otherwise closely | needs to do to understand the | |
| | tied to the code. Output is a | output, or to create a clearer | |
| | pdf file showing the code and | pdf, the lower the score. | |
| | the associated figures, graphs, | | |
| | tables, numerical answers, and | | |
| | discussion where appropriate. | | |
| | Hint, for Jupyter notebooks, | | |
| | provide a pdf file of the | | |
| | notebook pages with code and | | |
| | figures. | | |

Homework Tips:

1. Convert all of your outputs (copy of the code, graphs, any written discussion that might be required) into a SINGLE (multipage) pdf file.

2. Be sure your name is near the top of the first page, along with a title for that homework assignment (e.g., HW1 - Gaussian plume).

3. If you use Jupyter notebooks, don't send me the .ipynb file. Instead, print the notebook into a pdf file to submit. If all you have is the .ipynb file, then use <u>https://ubc.syzygy.ca/</u> to create the pdf.

4. Clearly label each exercise. Example: exercise 2b. Also, label each figure, so I know which exercise it goes with.

5. If there is a final numerical answer, highlight it in some way, so I know that it is the answer.

6. Make the figures or graphs reasonably large. (don't try to squeeze them all onto one page)

7. For contour plots, I prefer plotted contour lines with labels, not colour fills. (The colour fills look pretty, but use to much ink to print.) Be sure to label the axes, with units, etc.

8. Be sure to check that your answer makes sense physically before you submit it. Also, If something about the answer is revealing about the physics, or is surprising to you, then discuss it (briefly).

9. Make the finished product neat and attractive enough that you could show it to potential employers when you apply for a job.