Clarity is Important!

One of the main goals (in fact, maybe the main goal) of CSE 311 is to be able to learn how to express ideas clearly using mathematical formalism.

Style is Important!

You may lose points for style. Your proofs and explanations should be clear, well-organized and as concise as possible. It is better to err on the side of including too many details. Unfortunately, a lot of this is subjective. Often, students think of proofs as merely either “right” or “wrong”. This would be true if they were expressed in every last detail in a formal logic but not at the level that you will need to write them here. Writing a proof is more like writing an essay. Along these lines, if you are not able to find a complete answer to a problem, you are better off explaining clearly what you’ve done rather than faking a proof.

A Picture is Not A Proof!

Pictures and short pieces of pseudocode can be helpful, but they are not sufficient. Make sure to label everything. Define all the variables you use. Make sure you’ve explained everything clearly in English.

Review Your Proofs!

Try rewriting your proofs. Writing out your answer fully on a piece of scratch paper before writing up the version to hand in really does make a difference. You are more likely to catch mistakes or exceptions, and your proof will be better organized.

Notation is Key!

Set up good notation. Many of the exercises are phrased almost entirely in English. It will be your job to rephrase them mathematically when necessary. Your proofs will usually begin with something like, “Let $S$ be the set of students taking CSE 311.” Make sure that you’ve clearly defined any variable you use. Choosing good names for your variables is also important.

Collaboration Policy

Homework should be written up individually. It is okay to discuss problems with a few other students, but you may not write up solutions in a group, and you may not record anything from your discussions.

No Internet!

You may not consult the Internet for problems or key-phrases. This includes Google, MathOverflow, reddit, and any other website.

Extra Credit

Homework assignments will usually have extra credit problems. They will be scored separately from the regular problems, and they will have relatively little impact on course grades. The main incentive for doing the extra credit problems is for the challenge of doing the problems. Extra credit will be factored into the grade after grades have already been calculated.