

CMPS 102 — Winter 2019 – Homework Guidelines

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This document provides information on how to format and submit CMPS 102 homework assignments.

Collaboration policy The intent of the assignments is for each student to think about and work out the solutions, and the process of solving the problems is important for your understanding. Although students may discuss the problems in small study groups (at most 4 students), this is not encouraged, and students are required to write up their solutions on their own without the use of notes from the discussion.

Students *must* be able to reproduce their solution using just the text as a resource, as well as clearly explain the reasoning behind their solution to the course staff. Students benefitting from such discussion groups must clearly identify the group members and key insights discovered by the group.

Similarly, the problems are not intended to be library or web search exercises. If in searching for general background material you find a solution to one of the problems (or a similar problem) then that discovery must also be clearly acknowledged in your solution. Recall these excerpts from the syllabus:

Academic Honesty violations (cheating), such as submitting the un-attributed work of others, are serious issues and will result in a zero on the assignment, a lowered grade in the course, and a report to the department, and Dean of Graduate Studies. Improperly borrowed work can be as large as an entire solution or as small as a single sentence, figure, or idea. The CSE department has a zero-tolerance policy on academic dishonesty. Consequences within the class range from a zero on the entire assignment to failing the course, and are reported to the College Provost who will set formal proceedings in motion that can lead to suspension or expulsion from the university.

Cheating includes copying another students homework or allowing a student to copy your solutions. Any help you get on a homework (from any source other than the TAs, instructor, or text book) *must* be clearly described and acknowledged on your submission. Such help includes key discussions with other students, help from the MSI tutors, and information from the web or solution manuals. It is **not** allowed to “lend”, “borrow”, “trade”, or “show” written solutions to problems, or in any way share the act of writing up your answers.

How to prepare your solutions Each problem must be **typed** up separately (in at least an 11-point font) and submitted in the appropriate assignment box on the Canvas website as a PDF file. You are strongly encouraged, but not required, to format your problem solutions in \LaTeX . Template HW files and other \LaTeX resources are posted on the Piazza webpage. \LaTeX is a free, open-source scientific document preparation system. Most technical publications in CS are prepared using this tool.

You might want to acquire a \LaTeX manual or find a good online source for \LaTeX documentation.

The top of each problem must include the following:

- your name and your ucsc.edu account,
- the statement “I have read and agree to the collaboration policy. \langle Your name \rangle .”
- the names of all people you worked with on the problem (see the handout “Collaboration and Honesty Policy”), indicating for each person whether you gave help, received help or worked something out together, or “Collaborators: none” if you solved the problem completely alone.

Solution guidelines For problems that require you to provide an algorithm, you generally must give the following:

1. a precise description of the algorithm in English and, if helpful, pseudocode,
2. a proof of correctness,
3. an analysis of running time.

You may use algorithms from class as subroutines. You may also use any facts that we proved in class.

You should be as clear and concise as possible in your write-up of solutions. Understandability of your answer is as desirable as correctness, because communication of technical material is an important skill. A simple, direct analysis is worth more points than a convoluted one, both because it is simpler and less prone to error and because it is easier to read and understand. Points may be subtracted for illegibility, lack of clarity, and for solutions that are too long. Incorrect solutions will tend to get from 0 to 30% of the grade, depending on how far they are from a working solution. Correct solutions with possibly minor flaws will tend to get 70 to 100%, depending on the flaws and clarity of the write up.

Most problems should be solved within two typewritten pages, and longer answers may be penalized.