I am teaching 102 as a “theory” course. This means that there is no programming. On the other hand, there is a lot of proof writing and the course is homework-heavy.

Prerequisites: All students must have successfully completed CMPS 101. Transfer students must have credit for this course approved by the CIS/CE board office.

Main text (required): Algorithm Design, by Kleinberg and Tardos.

Material covered We will cover Chapters 5, 4, 6, 7 of the textbook (in that order). If time permits, we will also cover some of Chapter 8.

It is a very good idea to spend a few hours to review Chapters 2 and 3 on your own. If you find that review a tough going, please consider dropping the class and enrolling in Math 100.

Course Work: You will have 4-5 written assignments, an in-class midterm on Thursday February 18, and a final examination on Thursday March 17 at 12:00. Regarding the weight of homework towards you final grade you get to choose between one of the following two schemes:

<table>
<thead>
<tr>
<th>Default</th>
<th>Homework-heavy</th>
</tr>
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<tbody>
<tr>
<td>Homeworks 20</td>
<td>Homeworks 40</td>
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<tr>
<td>Midterm 20</td>
<td>Midterm 20</td>
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<tr>
<td>Final Exam 60</td>
<td>Final Exam 40</td>
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Indicate your choice on the front page of you first assignment. This choice will be final. If you don’t indicate a choice, the Default scheme will apply. I strongly encourage you to take the homework-heavy option, especially if exams tend to stress you out and you could use a regular stimulus against slacking. You will also learn more (just sayin’).

Important Rule: If you chose the Homework-heavy option you will be subject to the following rule. On each of the two exams (mid-term, final) there will be one question from a past homework. For that question, your exam-answer should be at least 75% as good as your homework-answer (allowances will be made for presentation and minor details). If that’s not the case, you will get a score of 0 for that question on the exam and the homework and you will be reverted to the Default grading scheme.

I will give an incomplete grade only if there has been a medical/family emergency and you have been doing at least average work.

Assignments: Do not cheat.

Remember: if you don’t cheat, you might lower your grade; if you do cheat you will lower yourself. If you believe that you deserve to cheat, e.g., because “this is a stupid class you shouldn’t have to take”, do the honorable thing and bring it up in class. Really. It’s a valid subject. It’ll be OK.

In any case: the Computer Science Department of UCSC has a zero tolerance policy for any incident of academic dishonesty. If cheating occurs, consequences within the context of the course may range from getting zero on a particular assignment, to failing the course. In addition, every case of academic
dishonesty will be referred to the students college Provost, who sets in motion an official disciplinary process. Cheating in any part of the course may lead to failing the course and suspension or dismissal from the university.

**What is cheating?** In short, it is presenting someone else’s work as your own. Examples would include copying another student’s written homework assignment, or allowing your own work to be copied. Although you may discuss problems with fellow students, use the following rule of thumb:

**What you turn in as your homework should be something that you could reproduce given nothing but pen, paper and a copy of the textbook.**

And, certainly, legitimate collaboration ends when you “lend”, “borrow”, or “trade” written solutions to problems, or in any way share in the act of writing your answers. When you do collaborate (legitimately) or receive help from anyone, you must credit them by placing their name(s) at the top of your paper. It really is OK and will not cost you grades.