This handout contains information about the problem sets for CS103. Specifically, it contains

- **submission instructions** so you know how to turn in the problem sets;
- our **Piazza policy** for asking questions online;
- our **collaboration policy** with information about working in pairs;
- **how we grade**, so you have a better sense of what we’re looking for;
- our **regrade policies**, which outlines our policy on regrading assignments; and
- our **late policy** information, which includes information about free late days.

If you have any questions, please feel free to contact the course staff.

### Submission Instructions

This quarter, we will be using GradeScope to handle problem set submissions and grading. To sign up for GradeScope, visit [www.gradescope.com](http://www.gradescope.com) and enter this code: **M74R88**

Once you've signed up, you can submit your assignments by uploading them to GradeScope.

GradeScope only accepts electronic submissions. Because in the past we’ve had issues with low-resolution scans of handwritten work, you are required to type your assignment solutions and submit them as a PDF; scans of handwritten solutions will not be accepted. LaTeX is a great way to type up solutions.

When submitting on GradeScope, if you’re working with a partner, please list both of your names on GradeScope in addition to on the PDF itself. To do so, have one person submit, then, after the submission completes, have them add the other student’s name to the submission. Since we rely on GradeScope for our final grading spreadsheet, if you forget to include your partner on the submission – or if your partner forgets to list you on the submission – then only one person will get credit for the assignment.

We **strongly** recommend that you always check to make sure that your assignment was submitted correctly, especially if you weren't the one submitting it, just in case your partner forgot to list you. Also, please be sure to submit your work for the proper assignment. If you submit Problem Set 4, for example, under the section for Problem Set 5, then your work won't be graded because we won't know where to look for it.

Some of the questions on the problem sets will ask you to write C++ code. Solutions to those programming questions need to be submitted separately than the problem set as a whole (they’re graded automatically), and the submission location on GradeScope will be well-marked.
Piazza Policy
We have a Piazza forum (http://www.piazza.com) where you can ask questions and search for partners. You're welcome to ask questions online, and the course staff and other students can then provide answers.

Please exercise discretion when asking questions that might give away the answers to problem set questions. If you'd like to ask a question that you think would give away too much information about the solution to a problem, please post your question privately.

Collaboration Policy
You are allowed to work on the problem sets individually or in pairs. In previous quarters, we allowed students to work in groups of three, but that is no longer the case in CS103. Regardless of how many people you work with, your problem set will be graded on the same scale. You are not required to work with the same people on each problem set – you're welcome to work in a pair on one problem set, individually on the next, in a pair with a different partner the next time, etc. If you do work in a pair, please note that both members of the pair are responsible for ensuring that each assignment is completed and submitted on time.

If you submit in a pair, you should submit just a single set of solutions. Both members of the pair will earn the same grade on the problem set. That way, two or more TAs don't accidentally end up grading the same submission multiple times.

For more details about collaborating with other students, please read over our Honor Code policy.

How We Grade
When grading assignments, we will grade both for intuition and for execution. When looking for execution, we will check whether your reasoning is correct, whether you prove the desired result, whether all your intermediary steps are valid, etc. If your proofs contain logical errors or prove statements other than the ones you needed to prove, we may deduct points for correctness. We will also grade your proof based on how clearly it lays out its argument and whether it adheres to the standard mathematical conventions governing proofwriting. If your proof proceeds on unnecessary tangents, doesn't clearly articulate where it's going, uses unnecessarily cryptic notation or shorthand, etc., then we may deduct points. See the Proofwriting Checklist handout for more details.

All the questions on problem sets in this class can be proven without referencing any theorems or results from advanced math courses. If you already have a background in proof-based mathematics, you may find that some questions on the problem sets follow from theorems you've seen proven in other courses. In the interest of fairness to all CS103 students, we reserve the right to assess a grading penalty to homework submissions that cite results or theorems that are not covered in CS103. As a rule of thumb, if your answer to a problem set question cites a result that wasn't proven in lecture, covered in an earlier problem set, or typically seen in a high-school algebra course, you are probably missing a cleaner line of reasoning.

Regrade Policies
We do our best in this course to grade as accurately and as thoroughly as possible. We understand how important it is for your grades to be fair and correct, especially since the graders' comments will be our main vehicle for communicating feedback on your progress. That said, we sometimes make mistakes while grading – we might misread what you've written and conclude that your reasoning is invalid, or we might forget that you proved a key result earlier in your answer. In cases like these – where we've misread or misinterpreted your proof – you're encouraged to contact the course staff and ask for a regrade. We want to make sure that your grade is accurate and will try to correct any errors we've made. We'll send out instructions about how to ask for a regrade once the first graded assignment is returned.
**Late Policy**

Our late policy is the following: for an assignment to count as being submitted on-time, it must

- have *finished submitting* before the deadline,
- have all questions properly tagged with the pages on which those questions were answered,
- be submitted in the right place, and
- have both partners listed as collaborators on GradeScope before the deadline (if you’re submitting in a pair).

Any work that does not meet these criteria may be counted late, or may be assessed a penalty, or may not even be graded at all. It is the responsibility of both partners in a pair to ensure that assignments are submitted properly.

This course is fast-paced and we'll be moving through material quickly. Because of the breadth of the material we'll be exploring, you may find that some homework assignments are easier or harder than others. For extra flexibility, you have **three** free “late days” you can use to extend the deadline of any (non-checkpoint) assignment by 24 hours. For example, using a late day on an assignment due on Friday at 2:30PM would make the assignment due on Saturday at 2:30PM.

If you have already used your late days and submit an assignment past the due date, we will grade it as usual, then assess a 0.7% penalty on your overall grade in the course. (It is almost certainly to your advantage to submit an assignment late rather than to submit nothing at all). This is a flat penalty irrespective of the number of days late, so if you submit an assignment two days late and have no late periods, we only assess a 0.7% penalty.

Although the programming and written portions of each assignment are submitted separately, they are considered logically to be the same assignment. We will consider an assignment late if either component is submitted past the deadline and will determine the number of late days used by looking at whichever part of the assignment was submitted last.

To make it possible to release solutions to problem sets on time, **no assignment submissions will be accepted more than two days past the normal assignment submission deadline.**

If you are working in a pair and submit late, each student in the pair will be charged the appropriate number of late days. If anyone in the pair does not have any more late days remaining, they'll receive the 0.7% penalty to their own grade.

Any assignment submitted late will automatically consume the appropriate number of late days, so if you submit an assignment six hours late – or six seconds late – we will charge you one late day. **Late days cannot be used on the checkpoint assignments.**

If you have any extenuating circumstances, such as a family or medical emergency, and need extra time to complete an assignment, please email our head TA (only the head TA – and not Cynthia or Keith – can approve extensions). All requests for extensions must be received at least 24 hours before the assignment due date.