It is a well-known, but not well received, fact that homework is the place where most learning and synthesis of the subject material takes place. There's a growing body of cognitive evidence that suggests that traditional lectures (passive teacher monologues with minimal students involvement) provide an environment where very little subject retention (learning) occurs. Even when the lectures are clear, interesting, full of demos and entertaining, if the material is not subsequently repeated, it is soon forgotten. True learning occurs when the information is transferred from the short-term to the long-term memory; this is where homework comes in.

Homework is the chance to demonstrate your understanding of the subject matter. Even though you may use many different resources to solve problems (other textbooks, teacher/TA office hours, group sessions, tutoring, etc...), your submitted assignment will reflect your grasp of the material. To be fair to all students, exams are in place to ensure individual learning, not for any other reason (despite what other professors may say or think). The ideal homework solution should be clear in exposition of the topic tested, the relevant equations and any assumptions used. It should also make generous use of pictures/graphs to avoid interpretation ambiguities by your grader.

Unless otherwise stated on the individual assignment, each homework problem will be graded out of five points. Since the number of problems per assignment may vary from week to week, the total number of possible points per assignment will vary. This policy is to avoid unfairly overweighing assignments with fewer homework problems. On the other hand, since easier problems count as much as the harder ones they should be seen as an opportunity to boost the homework grade. The following grading breakdown is a guide for how each problem will be graded:

## 0/5 The problem wasn't attempted.

1/5 The problem was attempted but executed completely wrong.
No work, explanations or discussion are shown.
2/5 Problem interpreted and executed incorrectly. Some discussion is shown.
3/5 Problem interpretation and discussion mostly correct but executed incorrectly.
4/5 Problem interpretation, discussion and execution mostly correct.
5/5 Problem interpreted, discussed and executed correctly.
Of course, these guidelines are subjective and open for interpretation. Use the homework solutions as a guide for what a $5 / 5$ should be. Any disagreements over grading should be immediately brought up to the TA and/or teacher.

