

For this course, you will be required to work in teams to complete weekly homework assignments. These teams will be composed of 3-4 people and will be assigned by the instructor.

Procedures

For a given assignment, your team will prepare a single solution to be submitted on the specified due date. All members of the team will receive the same score for the assignment.

In order to be most effective, each member of the team should attempt all problems in each assignment. While it is natural to approach such assignments in a “divide-and-conquer” manner, keep in mind that each person is individually responsible for mastering all of the material on each assignment. Allowing other members of your team to perform your work for you will not help you prepare for the exams.

Keep in mind that there are many ways to contribute to a successful homework group. Finding solutions to problems is an obvious way to contribute. But so are finding errors in proposed solutions, suggesting improvements in proofs, and helping everyone in the group to understand the agreed-upon solution.

Materials other than the course textbook and course notes may not be used in completing homework assignments. ***Copying solutions produced by outside sources is expressly forbidden, and will be penalized severely.***

Incentives

As an added incentive to encourage group interactions, every member of a team which earns an *average* raw score of at least 75% on any exam will receive a bonus of *two bonus points added to their final (adjusted) course average*. Thus, you can benefit not only from learning the material yourself but from helping your other teammates to learn the material.

Un-cooperative Team Members

If a team member refuses to cooperate on an assignment, the team should meet with the instructor to attempt to resolve the problem. Continued lack of co-operation by one or more team members may result in being “fired” from a team.

Students who are fired from their team must find another team willing to accept them as a member. Otherwise, the fired students will receive a score of 0 (zero) on all remaining assignments.

Team Evaluations

At various times during the semester, all team members will be required to evaluate the members of their team with respect to how well each member fulfilled their various responsibilities throughout the term. Final homework grades may be adjusted based on those peer evaluations. Students who perform more than their fair share of responsibilities may be rewarded; students who perform less than their fair share may be penalized.

Questions and Answers

Why teams? Numerous studies have been conducted which show that collaborative learning teams help students learn more and retain more of the information at hand. (Thus, teams can help improve grades!) In addition, such teams give students the opportunity to develop teamwork and interpersonal skills which are highly valued by employers.

Why teams in CS-312? Part of what we will be practicing in this course is logical reasoning and proof. While we will consider a formal mathematical definition of “proof”, a proof is usually thought of as a convincing argument. By working in groups, you will have the opportunity to try out these arguments on each other and work out the problems before attempting to convince the instructor.

Why all these rules? Cooperative learning works best when all team members actively participate and contribute. The reward structures provide an incentive to contribute to the success of the group as a whole. The penalty structures are in place to ensure individual accountability.