Exam 3 FAQ

[Questions about the exam](#_6dzx9t8hcp5r)

[Questions about the grading](#_c4rvwrqlvmri)

## Questions about the exam

1. **Why is this exam so much fun?**
   1. We are strongly committed to developing your knowledge, skills, and abilities. That is why we challenge you.
2. **Can you give me a hint on Problem X?**
   1. Try Harder. You can do it.
3. **Why do I have a score of 0 on the exam even though I am passing test cases?**
   1. During the exam, all the test cases have 0 points.
   2. You should address the tests cases you are failing and focus on coming up with the test cases you need in Tests.cpp to assess the correctness of your implementation.
4. **Can I copy code from my HW or LW or from the instructor’s material?**
   1. You can look at it, but we strongly advise you that you do not copy it.   
      Write everything from scratch. even if you already have the exact code you need from a LW or HW or personal side project. write it again from scratch on the exam for best results. This way of working will get your thinking "warmed up" to properly code the newly required functionality.
5. **I got a X% code coverage score. Does this mean that my test cases are sufficient?**
   1. The code coverage score only reveals the extent in which your test cases exercise the code you wrote. One can achieve a mythical 99% code coverage and still be missing crucial input cases.   
      The code coverage tool helps you to have test cases that cover the code you wrote, but it cannot reveal if you are still missing code to handle valid scenarios or if the code that you are executing has the expected behavior.
6. **What is test\_helpers.h and do I need it?**
   1. test\_helpers.h is Dr. Ritchey’s bootleg version of Google’s C++ unit testing framework (the same that Mimir uses for unit tests). You do not need it. It was in the starter code on some previous HWs, and is available (updated) on Dr. Ritchey’s Git repo: <https://github.tamu.edu/pcr/csce121-fall20/blob/master/testing/test_helpers.h>
7. **Does order matter for remove\_duplicates?**
   1. No. “*The order of the list after removing all duplicates is unspecified (i.e. order is not necessarily preserved)*.”
8. **Will the example test cases ever get to 100%?**
   1. They will never get to 100%. They are 50% (compiles and runs) or 0% (does not)

## Questions about the grading

1. Why do I earn a 0 if I fail “Approved Includes”?
   1. Because using library functions that you didn’t write to solve problems that you should know how to solve and which are being used to assess your ability to solve the aforementioned problems is akin to cheating and, anyways, it obscures the value of the assessment.
2. Why do I earn a 0 if I fail “Compiles Without Errors”?
   1. You have been writing and compiling C++ for (at least) 13 weeks by now. You have 75 hours during which you are writing and compiling your solutions to the exam problems. It is unacceptable to submit code that does not compile without errors.
3. Why is “Student Test Coverage” All or None?
   1. This test merely measures how much of your LinkedList.cpp code that you “test”. You do not necessarily need to verify correctness, you just need to execute (cover) at least 80% of the executable lines of code. You should be in the habit already of running and testing your code as you develop it. This test case captures the sentiment that you are either doing this, or you are not.
4. Are the “Optional (Partial Credit) Functions” for Remove Duplicates bonus points?
   1. The optional methods are not bonus points. Those are *optional* methods which can be implemented *in lieu of* a correct and complete remove\_duplicates() method. You will either score points for remove\_duplicates() or for the optional partial credit methods, but not both.
5. Am I going to earn a 0 / lose points if my code compiles but it has warnings.
   1. Not necessarily. You only get a 0 if your code fails to compile. Warnings do not prevent your code from compiling. However, warnings can give insight to potential problems in your code that might result in incorrect results. So, it is in your best interest to address the warnings.
6. Best or Last Submission is graded?
   1. Best.