CS 3210, Lab 3
Class Design and Implementation

1. PURPOSE
   The purpose of this lab is to explore classes in C++.

2. ASSIGNMENT
   Download the starter code for the lab on Canvas. Verify that you can compile the skeleton code. You will be responsible for completing the implementation and **fully testing** it. This code will be used in future lab assignments, so it must be 100% functional.

3. INSTRUCTIONS
   - Do **not** change any of the methods in the header file unless instructed to do so.
   - You may add private "helper" methods to the .cpp as needed.
   - Note the const parameters.
   - See the Lab Submission Instructions document on Canvas for submission instructions.
   - Add additional tests to main to ensure your class is correct. Use valgrind to test for memory leaks.

4. GRADING CHECKLIST
   - **No changes** are made to matrix .h file
   - All functions are implemented correctly
   - Provided main() code works correctly
   - Class is thoroughly tested in main()
   - No C libraries are used
   - Submission complies with guidelines
   - Source code presents as professionally written (comments, indentation, variable naming, structured)
   - Compiles with no errors or warnings
   - Runs to completion with no crashes or memory leaks (using valgrind)

5. ACADEMIC INTEGRITY
   This is a reminder that copying, in part or in whole from someone else's lab is against MSOE policy and is not allowed. I am more than willing to help you if you have any questions or issues writing the lab. My office hours are listed below. We can also schedule alternative times to meet, or you can message me on Teams.

   TEAMS OFFICE HOURS
   During these hours, if my status on Teams shows I am not already in a call, you can start a video call with me:
   Monday 11:00 am – 12:00 pm, 3:00 pm – 5:00 pm
   Tuesday 11:00 am – 1:00 pm, 3:00 pm – 5:00 pm
   Friday 11:00 am – 1:00 pm, 3:00 pm – 5:00 pm
   IN PERSON OFFICE HOURS
   Wednesday 12:00 pm – 1:00 pm Thursday 12:00 pm – 1:00 pm