COMP 3150 Programming in C/C++ – Fall 2024

Kriangsiri ("Top") Malasri

Instructor Contact Information:

- kmalasri@memphis.edu - I will almost always respond within 24 hours
- I'm on the unofficial CS Discord server as **Slothington IV**. Discord invite link: https://discord.gg/7brNMvuz76
- Office: Dunn Hall 396

- Office Hours: No formal hours, but feel free to contact me to schedule an appointment! I also encourage you to ask questions in the **#comp-3150** channel on Discord, as that can be beneficial for other students. However, do *not* post full programs there! Ask about the specific parts that are giving you trouble.

Lecture Meeting Times/Locations:

Section	Meeting Times	Location	Grader
001	TR 1120-1245	Clement 417	Luis Perez, lfperez@memphis.edu

Catalog Description:

COMP 3150 – Programming in C/C++ (3) Introduction to C/C++; software development environments; primitive data types, pointer, reference, struct; user defined structures; memory management; control statements; function; file I/O; introduction to object-oriented programming; C++ class; input and output with streams; inheritance, overriding, polymorphism; Standard Template Library. PREREQUISITE: COMP 2150, or permission of instructor.

Note: this is *not* an introductory programming course! The intent is to show how some of the things covered in COMP 1900 and COMP 2150 are done in C/C++, and cover some quirks of C/C++ that don't apply to Python.

Course Website:

Course materials and grades will be posted to the Canvas system at https://memphis.instructure.com/

Required Text:

No required text. I will regularly post lecture notes generously provided by Prof. Tom Watson.

Evaluation:

Lecture Attendance and Classwork	100 pts
Homework	550 pts
Midterm Exam	150 pts
Final Exam (Comprehensive)	250 pts

Your final percentage grade is determined by (your total points on all graded items) / 1000. Note that because there are 1050 maximum possible points, this gives you 50 points of built-in buffer in case your second cousin's ex-wife's brother-in-law has an event that forces you to miss an assignment, or a temporary zombie apocalypse happens to just your neighborhood, or whatever. *This also means I'll be strict about enforcing assignment deadlines. Please don't beg for late credit.*

Grading Scale:

Letter grades will be determined from your total points as follows:

A+: 960+; **A**: 900-959; **A-**: 890-899
B+: 870-889; **B**: 800-869; **B-**: 790-799
C+: 770-789; **C**: 700-769; **C-**: 690-699
D+: 670-689; **D**: 600-669
F: Below 600

Attendance:

It is crucial that you attend class regularly. There is a lot of material to cover, and we'll be moving at a brisk pace. *I will indirectly take lecture attendance via classwork submissions*.

Late/Makeup Policy:

All assignments are expected to be completed and turned in on schedule. Due dates will be clearly indicated for each assignment. Late assignments are NOT accepted except in extreme circumstances. Likewise, makeup quizzes and exams will be given only under extreme circumstances. *If you feel that your circumstances warrant a late work submission or a makeup quiz/exam, get in touch with me as soon as possible. Be prepared to show some kind of documented proof of your situation.*

Plagiarism/Cheating Policy:

An essential part of learning any skill is getting plenty of practice with it yourself. As such, *all grade items (unless specifically indicated otherwise) must be individual efforts*. If needed, you can get help from me, your friends/classmates, tutoring, and/or the Internet. However, any assistance should be focused on *helping you arrive at the answer on your own*.

Submitting material that was copied from the Internet, received from another person, or automatically generated by an AI tool such as ChatGPT is considered *plagiarism*. Plagiarism results in a minimum penalty of a 0 grade for the assignment on which it occurred and referral to the Office of Student Accountability. Repeated offenses may possibly result in a failing grade in the entire course. *Please don't put me (or yourself) in this situation.*

Getting Help:

Although I expect your work for this class to be done individually, I encourage you to seek help if you get stuck:

- Contact me! I'm very willing to provide hints without giving away the solution. I can be reached via email and/or Discord.
- Post something in the **#comp-3150** channel on the unofficial CS Discord server (see beginning of syllabus for an invite link). I or another person on the server will usually be able to help.
- Online tutoring: The UofM offers free online tutoring through the Educational Support Program (ESP): https://www.memphis.edu/esp/onlinetutoring.php

Miscellaneous Policies:

Email - Please check your University of Memphis email account at least once a day, as that is my primary means of communicating with you outside of class.

Student Disabilities - If you have a disability that may require assistance or accommodations, or if you have any questions related to any accommodation for testing, note taking, reading, etc., please contact me as soon as possible. You must contact the Disability Resources for Students office (901.678.2880, drs@memphis.edu, https://www.memphis.edu/drs/) to officially request such accommodations / services.

Tentative Course Schedule

Date	Lecture Material
8/27 8/29	Basic C programs, arithmetic, input/output
9/03 9/05	Conditionals, loops, functions
9/10 9/12	Call stack, recursion, arrays
9/17 9/19	Strings, random numbers
9/24 9/26	Pointers
10/01 10/03	Defining new types, dynamic memory management
10/08 10/10	Linked lists Review for midterm
10/15 10/17	*NO CLASS – Fall Break* MIDTERM EXAM – all C topics up to and *not* including linked lists
10/22 10/24	File I/O, preprocessing, multi-source programs
10/29 10/31	C++ vs. C
11/05 11/07	Object-oriented concepts in C++
11/12 11/14	Object-oriented concepts in C++
11/19 11/21	Object-oriented concepts in C++
11/26 11/28	Object-oriented concepts in C++ *NO CLASS – Thanksgiving*
12/03 12/05	Review for final *NO CLASS – Study Day*

FINAL EXAM (cumulative, same classroom as lecture):
Thursday, Dec. 12, 0800-1000

See the full final exam schedule here: https://www.memphis.edu/registrar/calendars/exams/24f-final-exams.php