

COMP 3150: Programming in C/C++ (Fall 2021)

- Time, place:** Tuesday/Thursday 5:30pm–6:55pm
Dunn Hall 233
- Instructor:** Thomas Watson
Dunn Hall 315
Thomas.Watson@memphis.edu
<http://www.cs.memphis.edu/~twwatson1/>
- Office hour:** Wednesday 2:45pm–3:45pm
- TA:** Mazharul Hossain (mhssain9@memphis.edu)
- Website:** <http://elearn.memphis.edu/>
- Topics:** C: input/output, arithmetic, control flow, functions, arrays, pointers, structs, dynamic memory management, files, preprocessor
C++: input/output, references, templates, exceptions, classes, object life-time, operator overloading, dynamic memory management, inheritance, polymorphism
- Prerequisite:** COMP 2150
- Textbook:** Recommended: *C How to Program, with an introduction to C++* (8th edition, not 9th) by Paul Deitel and Harvey Deitel
- Homeworks:** There will be twelve homework assignments, each covering the material of about two lectures. See the calendar near the end of this document for the schedule. You may discuss homework problems with other students, but you must write/code your solutions entirely on your own. You must submit each homework as a single zip file in the corresponding dropbox folder in the elearn website for the course. For any non-code homework solutions, you may use a word processor or include a scan/photo of handwritten solutions (as long as the image quality is good enough for the TA to read).
Homework is due right before the scheduled beginning of lecture, and late homeworks cannot be accepted since model solutions will be posted. Each student's lowest two homework scores from the whole semester will be dropped from the final grade calculation, so if extenuating circumstances prevent you from submitting a homework on time, one of these "freebies" will cover it by letting you take a 0 without harming your final grade.

Exams: The midterm exam is on October 14th during class (5:30pm–6:55pm) and will cover homeworks 1–6.

The final exam is on December 9th (5:30pm–7:30pm) and will be cumulative but with a strong emphasis on homeworks 7–12.

For the midterm exam you may bring one double-sided sheet of notes, and for the final exam you may bring two double-sided sheets of notes (feel free to use your midterm sheet for one of them). Your sheets of notes may be typed. You may not use anything else during an exam; this means no calculators, textbooks, phones, earbuds, or anything else.

Grading: 6% each for the ten highest homework scores
15% for the midterm exam
20% for the final exam
5% for attendance

Students who attend at least 18 of the 26 lectures (in person) will receive full credit for attendance.

We will calculate final letter grades in two different ways; then each student will receive the higher of the two letter grades. One way is a fixed grading scale, with the following cutoffs:

$$\begin{array}{llll} A \geq 90\% & A- \geq 85\% & B+ \geq 80\% & B \geq 75\% \\ B- \geq 70\% & C+ \geq 65\% & C \geq 60\% & C- \geq 55\% \end{array}$$

The other way is a curve, with the following percentages of students receiving each grade:

$$\begin{array}{llll} A: 15\% & A-: 15\% & B+: 15\% & B: 15\% \\ B-: 10\% & C+: 10\% & C: 10\% & C-: 10\% \end{array}$$

Any student who clearly did not put effort into the course will get an F.

Cheating: Plagiarism or cheating behavior in any form is unethical and detrimental to proper education and will not be tolerated. All work submitted by a student (projects, programming assignments, lab assignments, quizzes, tests, etc.) is expected to be a student's own work. The plagiarism is incurred when any part of anybody else's work is passed as your own (no proper credit is listed to the sources in your own work) so the reader is led to believe it is therefore your own effort. Students are allowed and encouraged to discuss with each other and look up resources in the literature on their assignments, but appropriate references must be included for the materials consulted. Students may not post homework problems to any website or copy solutions from any website (including Chegg and Stack Exchange).

If plagiarism or cheating occurs, the student will receive a failing grade on the assignment and (at the instructor's discretion) a failing grade in the course. The course instructor may also decide to forward the incident to the Office of Student Conduct for further disciplinary action.

Calendar:

Aug 24: lecture
Aug 26: lecture, hw 1 assigned
Aug 31: lecture
Sep 02: lecture, hw 1 due, hw 2 assigned
Sep 07: lecture
Sep 09: lecture, hw 2 due, hw 3 assigned
Sep 14: lecture
Sep 16: lecture, hw 3 due, hw 4 assigned
Sep 21: lecture
Sep 23: lecture, hw 4 due, hw 5 assigned
Sep 28: lecture
Sep 30: lecture, hw 5 due, hw 6 assigned
Oct 05: lecture
Oct 07: review session, hw 6 due
Oct 12: Fall break—no class
Oct 14: midterm exam (in class)
Oct 19: lecture, hw 7 assigned
Oct 21: lecture
Oct 26: lecture, hw 7 due, hw 8 assigned
Oct 28: lecture
Nov 02: lecture, hw 8 due, hw 9 assigned
Nov 04: lecture
Nov 09: lecture, hw 9 due, hw 10 assigned
Nov 11: lecture
Nov 16: lecture, hw 10 due, hw 11 assigned
Nov 18: lecture
Nov 23: lecture, hw 11 due, hw 12 assigned
Nov 25: Thanksgiving break—no class
Nov 30: review session, hw 12 due
Dec 02: study day
Dec 09: final exam (5:30pm–7:30pm)