

CPSC 327–C++ Programming

Instructor: Keith Perkins

Office Hours: Luter Hall 201-D
M,W,F 11-12:00 PM
T 10:50-12:30 PM
Th 10:50-12:15 PM

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Notes and Assignments: Course material will come from lecture notes, scholar, and the web.

Prerequisites: CPSC 250 (Java) or CPSC 270 or CPSC 255

Required Text: There is no required text for this class. I do however, recommend that you find a C++ reference and use it. A very good reference is; Absolute C++, any recent edition, Walter Savitch

Compiler and Integrated Development Environments (IDE)

This course will use GNU GCC and Eclipse CDT
GNU C++ compiler 7.4.0 (type g++ -v at terminal prompt to see version)

Operating System

This course will use linux (specifically Ubuntu LTS 18.04).

Projects

There will be up to six projects assigned this semester. They are not equally weighed (See below)
Due dates will be clearly noted and observed. Projects turned in up to 1 week late will be penalized 50%. Projects later than 1 week will not be accepted.

Project 1 - 100 points – makefiles

Project 2 - 100 points – File I/O

Project 3 - 100 points – Modeling a simple system

Project 4 - 100 points – Using static libraries and parsing strings

Project 5 - 200 points - Polymorphism

Project 6 - 250 points – TBD- (this project may be dropped)

Weekly Content and Assignment Calendar (Topics and dates may change)

Week	Topics	Test	Project Assign	Project Due
1	Intro, Market share, Linux, git C introduction, difference between C and C++		Project1	
2	C++ introduction, compilation, headers intro, makefiles, Eclipse setup and Intro , demo			
3,4	Headers, functions, Streams, Structs, Enums		Project2	Project1
5	Some C++ Syntax, Standard Library, Strings			
6	"		Project3	Project2
7	Standard Library iterators and Lists, Preprocessor directives Test 1			
8	C++ Pointers, References, Memory	Test1	Project4	Project3
9	"			
10	Classes, operators, memory management using RAII		Project5	Project4
11	Static keyword, Exceptions, assertions Test 2			
12	Inheritance, operator overloading, virtual heierarchy, Abstract Base Classes		Project6	Project5
13	Multithreading introduction			
14	"			Project6
15	"	Final		

Exams

There will be 2 exams during the semester and a final exam at the end of the semester. The final exam is comprehensive.

Make Ups

I will not give make-up exams or accept any late projects except in cases of documented illness or valid justification.

Grading Policy:

Final grades will be based on the following weighting distribution and scale.

Projects.....30%

Midterm120%

Midterm220%

Final Exam.....30%

Poin ts	100-93	92.9 9-90	89.9 9-87	86.9 9-83	82.9 9-80	79.9 9-77	76.9 9-73	72.9 9-70	69.9 9-60	< 59.9 9
Grad e	A (4.0)	A- (3.7)	B+ (3.3)	B (3.0)	B- (2.7)	C+ (2.3)	C (2.0)	C- (1.7)	D (1.0)	F (0.0)

Honor Code

The Honor Code will be strictly observed. All work must be done individually (except for assignments that explicitly allow teamwork). Cheating on any work will result in either a score of zero or an F for the course, and/or the filing of a case in the CNU honor court. Violation of the honor code may result in dismissal from the University.

Class Conduct:

Treat others in the class with respect. Please feel free to ask questions. Please arrive to class on time. Please turn off cell phones and beepers.

Disabilities:

In order for a student to receive an accommodation for a disability, that disability must be on record in the Office of Student Affairs, 3rd Floor, David Student Union (DSU). If you believe that you have a disability, please contact Dr. Kevin Hughes, Vice President of Student Affairs (594-7160) to discuss your needs. Dr. Hughes will provide you with the necessary documentation to give to your professors.

Students with documented disabilities are to notify the instructor at least seven days prior to the point at which they require an accommodation (the first day of class is recommended), in private, if accommodation is needed. The instructor will provide students with disabilities with all reasonable accommodations, but students are not exempted from fulfilling the normal requirements of the course. Work completed before the student notifies the instructor of his/her disability may be counted toward the final grade at the sole discretion of the instructor.

Success:

I want you to succeed in this course and at Christopher Newport. I encourage you to come see me during office hours or to schedule an appointment to discuss course content or to answer questions you have. If I become concerned about your course performance, attendance, engagement, or well-being, I will speak with you first. I also may submit a referral through our Captains Care Program. The referral will be received by the Center for Academic Success as well as other departments when appropriate (Counseling Services, Office of Student Engagement). If you are an athlete, the Athletic Academic Support Coordinator will be notified. Someone will contact you to help determine what will help you succeed. Please remember that this is a means for me to support you and help foster your success at Christopher Newport.

Academic Support:

The Center for Academic Success offers free tutoring assistance for Christopher Newport students in several academic areas. Staff in the center offer individual assistance and/or workshops on various study strategies to help you perform your best in your courses. The center also houses the Alice F. Randall Writing Center. Writing consultants can help you at any stage of the writing process, from invention, to development of ideas, to polishing a final draft. The Center is not a proofreading service, but consultants can help you to recognize and find grammar and punctuation errors in your work as well as provide assistance with global tasks. Go as early in the writing process as you can, and go often!

You may visit the Center for Academic Success to request a tutor, meet with a writing consultant, pick up a schedule of workshops, or make an appointment to talk one-on-one with a University Fellow for Student Success. The Center is located in Christopher Newport Hall, first floor, room 123.