CIS 22B: Intermediate Programming Methodologies in C++

Green Sheet

COURSE DATA

Course number:	CIS 022B-04Z
Course title:	Intermediate Programming Methodologies in C++
Term:	Spring 2025
Number of credits:	4.5
Number of hours per week:	Four hours lecture, seven hours laboratory (66 hours per quarter)
Schedule:	Lecture and exercises: online (Zoom T Th 1:30PM - 2:20PM)
Instructor:	Hann So email: sohann@fhda.edu http://deanza.instructure.com My email (or Canvas Inbox) is the preferred method of contact. If you email me, I will respond within 24 hours.
Office Hours:	T 12:30PM - 1:30 PM Telephone: 408-890-7476 (Zoom on demand)
Required textbook:	zyBooks CIS 22B: Intermediate Programming Methodologies in C++.
Recommended textbook:	Starting Out with C++: From Control Structures to Objects, 9th Edition by Tony Gaddis. Addison-Wesley. ISBN-13: ISBN-13: 978-0-13-449837-9 De Anza College Bookstore Phone: 408-864-8907 or 864-8949 http://books.fhda.edu/fhda/

Welcome

Welcome to Intermediate Programming Methodologies in C++. I am pleased you are joining us for this class. I want to take this opportunity to welcome you and to give you an overview of what to expect and what you need to do next.

Course Description

This course is a systematic approach to the design, construction and management of computer programs, emphasizing design, programming style, documentation, testing and debugging techniques. Strings, multidimensional arrays, structures, and classes. Pointers: their use in arrays, parameters and dynamic allocation. Introduction to linked lists.

General Purpose

The Student Learning Outcomes are:

- Create algorithms, code, document, debug, and test intermediate level C++ programs.
- Read, analyze and explain intermediate level C++ programs and their efficiency.
- Design solutions for intermediate level problems using appropriate design methodology incorporating intermediate programming constructs including structures and objects.

Requirements

- Passed CIS 22A.
- Access to a computer with an Internet connection and a C++ compiler.
- E-mail address
- Bring a USB jump drive to save your work and to carry work from school to home.

Attendance and Participation

Your prompt attendance is expected at all class sessions. Notify me in advance of your absence.

The end of the 8th week is the deadline for withdrawal with a "W". Please refer to the Schedule of Classes for the exact date. It is your responsibility to withdraw if desired; otherwise, the earned grade will be assigned for the quarter. See De Anza Academic and Administrative Calendar for the deadlines.

Scholarly Conduct

The De Anza College student handbook (https://www.deanza.edu/studenthandbook/academic-integrity.html), in the section titled "What is Academic Integrity? Honor Code Definition," states that "As a student at De Anza, you join a community of scholars who are committed to excellence in the teaching/learning process. We assume that all students will pursue their studies with integrity and honesty; however, all students should know that incidents of academic dishonesty are taken very seriously. When students are caught cheating or plagiarizing, a process is begun which may result in severe consequences." An infraction of Academic Integrity may result in a failing grade.

Assignments

The assignments will be graded online. When you complete an assignment, you must upload it and submit in Canvas. Your grade on the assignment will be returned electronically.

Late Work

Late work will be assigned a 10% per day penalty. Work submitted over two weeks late will earn a maximum of 10%.

Tests

There will be midterm and final exams.

Grading

Assignments	400
Exercises	210
Quizzes	120
Discussion Questions	110
Bio and Participation	60
Midterm Exam	100
Final Exam	100
Total	1100

Points	Grading
98-100%	A+

95-98%	A
90-94%	A-
87-89%	B+
84-86%	B
80-83%	B-
77-79%	C+
74-76%	C
70-73%	C-
67-69%	D+
64-66%	D
60-63%	D-
0-59%	F

Final Grades

You may access your final grades by going to My portal at https://myportal.fhda.edu/cp/home/displaylogin.

Schedule of Assignments

Week	Reading	Exercise and Lab Assignment
1	Ch.7: Two Dimensional Array Ch.7: Vectors Ch.8: Search and Sort	Exercise 7.5 Exercise 7.6 Quiz 8 Pre test Quiz Assignment 1 DQ 1 and DQ 2 Participation Bio
2	Ch.9: Pointers	Exercise 9.2 Exercise 9.4 Quiz 9 Assignment 2 DQ 1 and DQ 2 Participation
3	Ch.10: Characters, C-Strings	Exercise 10.2 Exercise 10.4 Quiz 10 Assignment 3 DQ 1 and DQ 2 Participation
4	Ch.11: Structured Data	Exercise 11.2 Exercise 11.4 Assignment 4 Quiz 11 DQ 1 and DQ 2 Participation
5	Ch.12: Advanced File Operations	Exercise 12.2 Exercise 12.4

		Quiz 12 Assignment 5 DQ 1 and DQ 2 Participation
6	Midterm Exam Ch.13: Introduction to Classes	Exercise 13.2 Assignment 6 DQ 1 and DQ 2 Participation
7	Ch.13: Introduction to Classes (continued) Ch.14: More about Classes	Exercise 13.4 Exercise 14.2 Quiz 13 Assignment 7 DQ 1 and DQ 2 Participation
8	Ch.14: More about Classes (continued) Ch.15: Inheritance	Exercise 14.4 Exercise 15.2 Quiz 14 Assignment 8 DQ 1 and DQ 2 Participation
9	Ch.15: Polymorphism, and Virtual Functions Ch.16: Exceptions, Templates	Exercise 15.4 Exercise 16.2 Quiz 15 Assignment 9 DQ 1 and DQ 2 Participation
10	Ch.17: Standard Template Library Ch.17: The map, multimap, and unordered_map Classes	Exercise 17.2 Exercise 17.4 Quiz 16 Assignment 10 DQ 1 and DQ 2 Participation
11	Ch.18: Linked Lists	Exercise 18.1 Exercise 18.3 Quiz 17 Assignment 11 DQ 1 and DQ 2 Participation
12	Final Exam	

Notice on Learning Disabilities

If there are any students with a learning disability or physical challenge, you are entitled to any assistance you need to achieve your academic goals. De Anza College has an on-campus lab with talking computers, print enlargers, tactile maps of the campus, and other alternate learning options. If you or anyone you know would benefit from such a service, please call Disabled Student Services at (408) 864-8753.
TTY number: (408) 864-5650

Please also contact us if you have suggestions for making this course more learning accessible for you.