CIS 22B: Intermediate Programming Methodologies in C++

Winter 2024

Instructor: **Hoang M. Nguyen**

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Class website: https://deanza.instructure.com/

Online Lecture Hours: Asynchronous
(see Canvas for class materials, assignments and recorded lectures)
CRM: **32353** Schedule ID: **CIS -022B-62Z**

Online Office Hours: **05:30 PM – 06:00 PM Thu**
https://fhda-edu.zoom.us/j/88972111740

Prerequisites: CIS 22A

Course Description: https://www.deanza.edu/catalog/courses/outline.html?cid=CIS22B

Course Learning Outcomes: Upon completion of the class, the students will be able to:

- 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.

Required Textbook: **CIS 22B: Intermediate Programming Methodologies in C++**
zyBook ISBN: 978-1-394-07353-5
https://learn.zybooks.com
Note: This is integrated and available inside Canvas module.

Grading Policy:

- Final Exam: 25%
- Midterm: 20%
- Programs: 45%
- Exercises: 10%

Grade's Scale:

A+	A	A-	B+	B	B-	C+	C	D	F
99+%	92-98%	90-91%	88-89%	82-87%	80-81%	78-79%	70-78%	60-69%	<60%

Important dates: http://www.deanza.edu/calendar/index.html

Notes:

- The final exam will be comprehensive with the emphasis on topics covered after the midterm exams.
- Programming assignments will be graded on whether they work as required, documentation, program structure, and the completeness of testing.
- Students must attend the online lecture and are encouraged to make use of the office hours
- All assignments and class materials will be posted online at the school's Canvas website.
- There may be extra credit exercises and assignments for those who would like to improve their grades and/or pursue advanced topics.

Tentative Course Outline

Week	Topics (Chapters)	Work Due
1	C++ Review (Ch 21-23) C++ Functions and Streams (Ch 24-25)	
2	Two-Dimensional Arrays and sorting (Ch 1)	
3	Pointers (Ch 2)	
4	C strings, C++ String Class, Structures, File operations (Ch 3) Objects and Classes (Ch 4)	
5	Objects and Classes (Ch 4) Templates (Ch 5)	Pgm1 Due
6	Templates (Ch 6) Review	
7	**Midterm Exam** Inheritance (Ch 7)	
8	Inheritance (Ch 7) Exceptions (Ch 27)	Pgm2 Due
9	Exceptions (Ch 27) Recursion (Ch 26)	
10	Selected Topics	
11	Review	Pgm3 Due
12	**Final Exam**	

Important links:

- Resources On Campus:
  - Student Success Center (deanza.edu)
  - EOPS
  - Counseling
- Academic Integrity (deanza.edu)
- Mutual Respect Policy
- Emergency Funds Application (deanza.edu)
- Disability Support Programs and Services Division (deanza.edu)
- Academic calendar
- Final Exam Schedule (deanza.edu)
- Important Dates (i.e., Drop date, etc.)