Syllabus

Syllabus for CIS22B Summer 2022 (4.5 Units) Course Section: 53Z CRN: 13063 Instructor: ShuHuar Yeh Email: <u>yehshuhuar@fhda.edu</u> Class Meetings: No class meetings. Exam Dates: Midterm THUR JULY 14, Final THUR AUG 4. For details, see schedules on the <u>home</u> page

Prerequisites: CIS 22A.

Course Description: 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. Software engineering and computer science students are the targeted group.

Student Learning Outcome Statements (SLO)

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

Course Objectives:

Upon completion of the course, the student will

- Know how to construct and develop good intermediate level C++ programs.
- Appreciate well-organized and well-documented programs.
- Have learned the usage of pointers in various ways: arrays, functions, and dynamic memory allocation.
- Have learned how to process text data using C-strings and string
- Have learned how to process structured data.
- Have learned how to use classes for problem solving.
- Know various topics about classes: access specifications, constructors, destructors, static members, friends, operator overloading, object conversion, object aggregation, inheritance, and polymorphism.
- Have learned the basic linked list operations: Traverse, Search, Insert, and Delete. Design, code, and test programs using linked lists.
- Know how to write code that can handle exceptions.
- Know how to enable code reuse through templates.
- Be inspired to learn more about software development technologies.

Text required:

ZyBooks

- 1. Click on your zyBooks link in the Canvas assignments. (Do not go to the zyBooks website and create a new account)
- 2. Subscribe. The provider has a charge for the subscription.

Gaddis, Tony Standard Version of Starting Out With C++ from Control Structures through Objects(9th Edition), 2018 ISBN: 9780134498379 (8th edition of the same book is also good to use.)

Equipment required:

A laptop/desktop equipped with an IDE for developing C++ code. Internet access.

Attendance policy: There are no class meetings. You should plan on spending at least 8 hours per week in the homework and lab assignments. If you wish to drop the class, it is your responsibility to do so. Stop participating in the class activities without following official withdrawal procedures will result in your being assigned a grade of "FW" (or "NC" if you have selected the Credit /No Credit option).

Scholarly conduct: In order to be successful in this class you will have to make a commitment to studying, reading the text, doing your homework, writing your lab assignments, attending class (if required), and taking notes. These activities add up and can positively affect the grades. You are expected to do your own work. **Copying or cheating on a lab assignment or during a test will result in a zero** being assigned for that assignment or test. In programming classes, students often confer with one another on approaches to solving the problem: however, your solutions to lab problems must represent your own individual work. Do not copy solutions from others. Copying a source code and disguising with cosmetic changes is still a copy. **Any copied solutions will result in a zero grade for both parties**, and may result in a failing grade. It may also result in dismissal from class. Please check the current Schedule of Classes to learn more about academic integrity, other policies, and Student Standards of Conduct.

Homework: You will earn points by doing homework.

Tests: There will be <u>pop quizzes</u> throughout the course, a <u>midterm</u> and a <u>final</u>. The points you earn from the quizzes are counted as extra credit. There will be **no make-up** for the quizzes you have missed. The midterm and final exams are open book, open notes. Midterm and final dates are shown on the calendar. Students must join online at the scheduled date and time for each exam. Final exam papers, if any, will be retained for a period of 90 days from the exam date.

Laboratory assignments: You will be given individual lab assignments. All assignments must be turned in on or before the due date. Due dates are listed in each assignment on Canvas. Partial credit will be given for incomplete assignments. Late submissions are subject to deduction. For more information on the grading of lab assignments, see Lab Requirements.

Extra-credit may occasionally be given throughout the course.

_Grading: The following table shows the weights of the activity groups.

Weights of Activities

Activity	Occurrence	Weight
Labs and Homework	See assignments	50%
Midterm and Final	1 each	50%
Total		100%
Extra (quizzes, etc.)		3%

Grading scale:

Grading Scale			
Percentage	Grade	Notes	
90 - 103	$\Delta = \Delta \Delta \perp$	For A and A+ grades, the programming portion of the final exam must be assessed at 90% or above.	
80 - 89.9	B-, B, B+		

70 - 79.9	C, C+	
60 - 69.9	D	
0 - 59.9	F	

Useful Links

Important Dates (i.e., Drop date, etc.): https://www.deanza.edu/calendar/

□ Resources On Campus: <u>Tutorial</u>, <u>EOPS</u>, <u>Counseling</u>, etc...

□ Classroom Conduct: <u>Academic Integrity</u>. <u>Check the college website at:</u>

https://www.deanza.edu/policies/academic integrity.html

□ <u>Mutual Respect Policy</u>

□ <u>Student Grievance Procedure</u>

□ Student Rights & Responsibilities

CARES Emergency Care Funds: <u>https://www.deanza.edu/resources/emergency-funds.html</u>

□ Students with special needs to: <u>http://www.deanza.edu/dsps/index.html</u>