Course Syllabus

Syllabus for CIS22B Summer 2023 (4.5 Units)

Course Section: 41Z

CRN: 13063

Instructor: ShuHuar Yeh
Email: yehshuhuar@fhda.edu

Office Hour: Wednesdays, 5:30 PM - 6:00 PM, 8:00 to 8:30 PM via **ZOOM** Class Meetings: Wednesdays, 6:00 PM - 7:50 PM, ONLINE via **ZOOM**

Exam Dates: Midterm WED July 19, Final WED Aug 9. For details, see schedules on the home

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 several ways: arrays, functions, and dynamic memory allocation.
- Have learned how to process text data using C-strings and string objects
- Have learned how to process structured data.
- Have learned how to use classes for problem solving.
- Know several 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 class meetings via ZOOM. Attendance will be taken. Class meetings may be recorded in case you need to be excused occasionally. You should plan on spending at least 10 hours per week on homework and lab assignments. If you wish to drop the class, it is your responsibility to do so. Stop taking part 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: To be successful in this class, you must commit to studying, reading the text, doing homework, writing lab assignments, attending class, 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 be your own individual work. Do not copy solutions from others. Copying a source code and disguising it 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. There is a due date for every homework assignment. Late submissions are subject to deduction.

Tests: There will be pop quizzes throughout the course, a midterm and a final. 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 kept for 90 days (about 3 months) from the exam date.

Laboratory assignments: You will be given <u>individual lab assignments</u>. <u>All assignments must be turned in on or before the due date.</u> 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 <u>Lab Requirements</u>.

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 | A-, A, A+ | For A and A+ grades, the programming portion of the final exam must be assessed at 80% or above. |
| 80 - 89.9 | B-, B, B+ | |
| 70 - 79.9 | C, C+ | |
| 60 - 69.9 | D | |
| 0 - 59.9 | F | |

Useful Links

| ı | mportant | Dates | (i.e | Drop | date. | etc.) | : |
|---|----------|--------------|------|------|-------|-------|---|
| | | | | | | | |

http://deanza.fhda.edu/calendar/

- ☐ Resources On Campus: <u>Tutorial</u>, <u>EOPS</u>, <u>Counseling</u>, etc...
- ☐ Classroom Conduct: Academic Integrity. Check the college website
- at: https://www.deanza.edu/policies/academic integrity.html
- ☐ Mutual Respect Policy
- ☐ Student Grievance Procedure
- **□Student Rights & Responsibilities**
- □ CARES Emergency Care Funds: https://www.deanza.edu/resources/emergency-funds.html
- ☐ Students with special needs to: http://www.deanza.edu/dsps/index.html

Useful Links

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

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