

**CIS 22B INTERMEDIATE PROGRAMMING METHODOLOGIES IN C++**

<b>Instructor</b>	Victor Yu
<b>Meeting Hours</b>	Lectures: Tuesday and Thursday: 11:30 am-12:30 pm Lab Hours (optional): Tuesday and Thursday: 12:40pm – 1:20pm <u>Online</u> : Tuesday, Thursday: 8:30PM-9:00PM
<b>Email</b>	yulinyun@fhda.edu
<b>Course Site</b>	<a href="http://elearning.ebookriter.com">http://elearning.ebookriter.com</a> (Enrollment key: CPlusPlus)
<b>Self-Test</b>	<a href="#">MyProgrammingLab</a> (Section Access Code: DEAN-17606-SFFF-23)

**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

Upon successful completion of this course, students should be able to:

- 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.
- Create algorithms, code, document, debug, and test intermediate level C++ programs.

**REQUIRED MATERIALS**

[Starting Out with C++: From Control Structures through Objects, 8th Edition](#), By Tony Gaddis, 8<sup>th</sup> Edition, 2014. Publisher: Addison-Wesley, ISBN-13 976-0376939-5 ISBN-10: 0-13-376939-9 Available for purchase or rent on [Amazon](#),

**COURSE REQUIREMENTS**

<b>Attendance</b>	Your attendance is expected in all lectures, because some of the materials presented in class may not be in the textbook. If you miss any class, you are still responsible for completing all work assigned in this class in a timely fashion. You are expected to do the assigned readings before each session and to come prepared for the discussion. Lab attendance, however, is optional. If you have a computer at home with a C++ development environment installed, you may choose to work on your labs from there.
<b>Scholarly Conduct</b>	Discussion and exchange of ideas on assignments are strongly encouraged. However, each person is expected to complete his/her own computer work. Identical solutions will be given a zero grade. Copying or cheating during an exam will result in a zero being assigned to the test grade for both parties.
<b>Participation &amp; Assignments</b>	Assignments are important component of the course. You will not learn by attending lecture in lieu of completing assignments. Assignments consist of: <ul style="list-style-type: none"> <li>• Required reading assignments</li> </ul>

- Labs

**Exams**

There will be 2 midterms and 1 final exam.

- Make up for the midterms rarely allowed, unless for emergency reasons or prior approval. Prior approval must be obtained at least one week before the scheduled exam.
- The final exam must be taken during the scheduled time, there is no early or late exam taking.

Both exams are comprehensive.

**ACADEMIC RESOURCES AND SUPPORT****Tutoring**

De Anza's Tutorial Center is located in L47. You may receive tutoring services including drop-in help, regularly scheduled tutoring sessions, and/or online tutoring assistance. These and many other academic support services are part of the Student Success Center: <http://www.deanza.edu/studentsuccess/>

**Library Support**

Many library materials can be accessed from an off-campus computer. Go to the library webpage at <http://www.deanza.edu/library>. You will need either your 14 digit library number, posted on the front of your DASB card or your 8 digit student identification number to verify your student status. See the library webpage for more details.

**GRADING**

Grading is based on the percentage of the total points obtained:

Participation & Contributions	5%
Programming Labs	50%
Midterm 1	15%
Midterm 2	15%
Final exam	15%

A	90-100%
A-	86-89%
B+	80-85%
B	76-79%
B-	70-75%
C+	66-69%
C	60-65%
F	<=59%

## TENTATIVE SCHEDULE

<b>Week</b>	<b>Topics</b>	<b>Chapter Readings</b>	<b>Labs &amp; Exams</b>
1	Recap of CIS22A Two dimensional arrays	7.9	Lab1 Assigned
2	Pointers and Dynamic Allocation	9	
3	C-Strings, C++ string class	10	Lab 2 Assigned
4	Structured Data	11	Midterm 1
5	Advanced I/O	12	Lab 3 Assigned
6	Introduction to Classes, OO Design	Chapter 13	
7	Function Overloading, ADT		Lab 4 Assigned
8	Review		Midterm 2
9	Friend Functions, Operator Overloading	14	Lab 5 Assigned
10	Inheritance and Polymorphism	15	Lab 5 Assigned
11	Exceptions, Templates, and STL, Linked Lists	16, 17	
12	Final Week		Final