CIS 022A   BEGINNING ROGRAMMING METHODOLOGIES IN C++

Instructor	Victor Yu
Meeting Hours	Lectures: Tuesday, Thursday: 9:30 am - 10:30 am
	Lab Hours: Tuesday, Thursday: 10:40pm – 11:20pm
	Online: Monday, Wednesday: 9:00pm-10:00pm
Course Site	http://elearning.ebookriter.com (Enrollment key: HackC++)
Self-Test	MyProgrammingLab (Section Access Code: DEAN-19114-QVVL-24)

COURSE DESCRIPTION

This course is an introduction to computer programming. Its primary objective is to teach problem solving using the C++ programming language. Emphasis will be placed on structured procedural programming with an introduction to object-oriented programming. This course is designed primarily for computer science and related transfer majors.

- Illustrate the difference between procedural and object oriented programming.
- Demonstrate the software life-cycle steps including design, development, styles, documentation, testing, and maintenance in the creation of program.
- Use the C++ environment in the development and testing of programs.
- Illustrate declaring identifiers of different data types.
- Use data types to declare variables in C++ programs.
- Apply input and output functions to read data using keyboard and output to screen.
- Use expressions, statements and operators to construct program building blocks that compute values.
- Apply control structures to break up flow of program execution and conditionally execute blocks of code.
- Implement functions/methods in programs for clarity and efficiency in code development.
- Develop programs using functions that enable input and output with text files.
- Demonstrate usage of arrays to process variety of data problems.

REQUIRED MATERIALS

Starting Out with C++: From Control Structures through Objects, 8th Edition, By Tony Gaddis, 8th 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

Attendance	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 not mandatory. If you have a computer at home with a C++ development environment installed, you may choose to work on your labs from there.

Scholarly conduct	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.

Participation & Assignments Assignments are important component of the course. You will not learn by attending lecture in lieu of completing assignments. Assignments consist of:

- Required reading assignments
- Six programming 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 PERSONAL SUPPORT

Tutoring De Anza's Tutorial Center is located in S43. 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 & Contribution	5%
Labs:	35%
Midterm I:	20%
Midterm II:	20%
Final:	20%

A = 90-100%
A- = 86-89%
B+ = 80-85%
B = 76-79%
B- = 70-75%
C+ = 66-69%
C = 60-65%
F = 0-59%

Tentative Schedule

Week	Topics	Chapter Readings	Exams	Notes
1	Computer and Programming Concepts	Chapter 1		
2	Introduction to C++ • Program structure • Literals • Variables • Constants • Coding standard	Chapter 2		Lab 1 due
3	Statements and Expressions	Chapter 3		
4	Review		Midterm I	Lab 2 due
5	Conditional Statements	Chapter 4		
6	Repetition Statements Files	Chapter 5		Lab 3 due
7	Functions	Chapter 6		
8	Review		Midterm II	Lab 4 due
9	Arrays	Chapter 7		
10	Searching and Sorting	Chapter 8		Lab 5 due
11	Review			
12	Final Week		Final Exam	Lab 6 due