

Chemeketa Community College

4000 Lancaster Drive NE

PO Box 14007

Salem, Oregon 97309

Course Outline

Course

Identification CS133U **Credits** 4 **Date** 11/05

Course Title: C++ Language

Total Instructional Hours, for Course, per Term:

44 Lecture Hours = 4 Credit(s)
0 Laboratory Hours = 0 Credit(s)

Prerequisite Course(s):

CIS121 Computer Information Science 2 or consent of instructor

Required Text(s):

Ramteke, Timothy S., *Introduction to C and C++ for Technical Students, A Skill-Building Approach*, 2nd Edition, Prentice Hall

Schildt, Herbert, *C++: The Complete Reference*, 4th Edition, McGraw-Hill Osborne Media

Course Description:

Introduces the C++ programming language. Covers the structure of the language, manipulation of data, objects, pointers, references, and arrays. Includes how to manage input and output functions.

Performance Based Learner Outcomes:

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

1. Program using structured and object oriented programming theory and the C/C++ language.
2. Apply basic programming terminology and theory to writing C/C++ programs.
3. Explain the use of pointers and memory references.
4. Apply C/C++ language keywords and syntax to create statements for declaring and storing data types and manipulate data using the C/C++ language.
5. Design programs which use header files, pointers, classes, functions, selection, and repetition.

Course Content Outline:

- I. Program Documentation
- II. Structured and Object Oriented Programming Concepts
- III. Data Types and Assignments
- IV. Arithmetic and Logic Expressions
- V. Conditional and Control Statements
- VI. Functions, Classes, and Objects
- VII. Pointers and References
- VIII. Arrays