

Inver Hills Community College

CS 1119: Computer Programming with C++

A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 4

Lab Hours/Week: 0

OJT Hours/Week: *.*

Prerequisites:

MATH 0096 - Topics in Intermediate Algebra (Minimum grade: 2.0 GPA equivalent and Number of Years Valid: 2); OR

MATH 0940 - Intermediate Algebra (Minimum grade: 2.0 GPA equivalent and Number of Years Valid: 2)

Corequisites: None

MnTC Goals: None

Introduces computer problem solving using C++ and an object oriented approach. Topics include data types, control structures, I/O streams, functions, arrays, structures, pointers, searching, sorting, and recursion. Designed for those students with no prior programming experience. Prerequisites: MATH 0940 (formerly MATH 0099).

B. COURSE EFFECTIVE DATES: 01/01/1998 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Arrays and strings
2. Arrays of pointers
3. Control structures in C++
4. Data structures
5. Datatypes and operations
6. File input and output
7. I/O Streams
8. Pointers
9. Recursion and iteration
10. Searching and sorting
11. Structures and union types
12. Use of functions

D. LEARNING OUTCOMES (General)

1. Be introduced to fundamental principles of programming and to different programming paradigms
2. Be introduced to the UNIX operating system
3. Gain the background necessary for further studies in Computer Science
4. Learn program design, coding, debugging, testing, and documentation using good programming style
5. Become proficient in the use of C++
6. Program applications in the subject areas specified by the ACMM/IEEE-CS Joint Curriculum Task Force

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted