

Miami Dade College

COP 2334 – Object Oriented Programming in C++

Course Description:

Advanced study of the C language with emphasis on object oriented programming, graphics, and list processing. Students are required to design, code, compile, and execute programs for the business and scientific environment. A.S. degree credit only. (3 hr. lecture; 2 hr. lab)

3credits

Prerequisite: None

Competency/ Objectives:

I. Review

1. Pointers
2. Memory Allocation
3. Abstract Data Structures

II. Comparisons Between C and C++

1. Variable Declaration and Initialization
2. Basic Input/Output Functions
 - a. Cin
 - b. Count
3. Function Prototyping
4. Inline Functions
5. Argument Checking

III. Object Oriented Programming

1. What is Object Oriented Programming?
2. Why Object Oriented Programming?
3. Object Oriented vs. Structured Programming
4. Design of Object Oriented Programs
5. Classes
6. Inheritance
7. Polymorphism
8. Function Overloading
9. Virtual Functions
10. Operator Overloading
11. Constructors
12. Destructors

IV. Applications Using Object Oriented Programming

1. Event Driven Applications
2. List Processing
3. GUI Program Examples
4. Data Base Examples