CS 112 Midterm #2 Study Guide

Object-Oriented Programming

Encapsulation

Inheritance – When a class is defined in terms of a previously defined class.

Polymorphism – Allows the same action to invoke class dependent (many shapes) methods. Requires: Inheritance, Method Overriding.

Friend Function – A normal function that is not a member (method) of the class but is allowed access to the data. Example: friend \_\_function prototype\_\_. One (or more) parameters need to be an object of the class.

Arrays

Alone

Within a class

Of a class

Example of 5D Array – int exam[year][semester][class][student][test]

Also Included

Switch

Bool

Const

Casting

Function prototypes

Function overloading

Method overriding – A new method with the same name in the class.

cin.get()

cin.getline(array, size) – Gets and discards ‘\n’. Adds the Null char to the end.

Recursion – When a function calls itself

Primitive Datatypes: Integer, float, character, Boolean

Protected – Allows Access to children classes but not to the outside world. Allowed simultaneously with public and private.