

CSC 161 SUMMER 2015
LIST OF COVERED TOPICS

PROFESSOR GODFREY C. MUGANDA

1. WEEK 1: INHERITANCE

Revision of important concepts from CSC 160: Objects, classes, instances of a class; instance members of a class; static members of a class; private and public fields; methods of a class; method overloading; class constructors; constructor overloading; default constructors.

Method parameters: formal parameters and actual parameters; local variables of a method.

Use of the `this` reference.

Inheritance and class constructor.

Calling the super class constructor.

Summary of constructor issues in inheritance.

The fact that superclass references can point to subclass objects. The fact of *dynamic method binding*.

Overriding superclass methods; the difference between method overriding and method overloading.

The `Object` class. A superclass reference can reference objects of a subclass. The is-A relation. Polymorphism. The *instanceof* operator. Abstract classes and interfaces.

2. WEEK 1 PRACTICE QUESTIONS

1. Define the concepts of a *class* and *object* in an object-programming context:

2. What is the difference between *formal parameters* and *actual parameters* of a method? Explain.

