## **COSC 2436**

## Programming Fundamentals III – Java Data Structures Dr. Koshy Joseph

## Lab #1 – Designing Classes – Software Engineering

NAME		

**Problem:** Using the 'Name.java' and 'Student.java' files, expand both classes to include the following methods:

- A 'copy' constructor,
- A 'clone' method,
- A 'finalize' method,
- A 'dispose' method, and
- A 'hashCode' method.
- A 'compareTo' method

Test the upgraded classes using the application 'TestStudentName.java' located in 'Chapter01 Files.zip'.

Be sure to include output messages in both the 'finalize' method and the 'dispose' method.

**Requirements:** You will submit the following with this lab:

A copy of the source code and related project files will be placed in a directory and Zip it and post.

**NOTE 1:** Each program should have a section of comments at the top.

- Be sure the comment section includes your name, class and section, lab number, and the date the lab was completed.
- This section should also provide any relevant information on the program.
- NOTE 2: All code must conform to generally accepted coding standards including the naming of variables, classes, and any constants. The code should also be appropriately indented to insure readability.