**ICS 201 – Introduction to Computing II**

**Lab # 10 – Abstract Classes**

**Objectives:**

In this lab, the following topic will be covered:

1. Abstract Classes

**Exercises**

Design a new **Triangle** class that extends the **abstract** **GeometricObject** class. Write a test program that prompts the user to enter three sides of the triangle, a color, and a Boolean value to indicate whether the triangle is filled. The program should create a **Triangle** object with these sides and set the **color** and **filled** properties using the input. The program should display the area, perimeter, color, and true or false to

indicate whether it is filled or not.

Given a triangle with sides a, b, and c, Heron’s formula for the triangle area is:

S = (a + b + c) / 2