## Lab Exercise 9

## **Focus**

- 1. Classes and Objects
- 2. Creating objects
- 3. Manipulating objects

This lab maps to learning objectives 1 through 3 in Competency Nine: Write a working program that creates a Class, Instances of Objects from that Class, and Functions that use Objects as parameters.

## **Define Classes and Create Objects**

For this portion of the lab, you will create a new program for Professor Polanco (this is the last one!) Create a class named Student that holds the following data about a student: **(LO 1, 3)** 

- 1. Name
- 2. Student ID number
- 3. GPA
- 4. Expected grade in this course
- 5. Full time or part time

Create five student objects from this class and pass data to fill in the class data above.

(LO 1, 2, 3) Besides creating the objects, you will write a menu-driven program that performs the following tasks: (LO 1, 2, 3)

- 1. Look up and print the student GPA
- 2. Add a new student to the class
- 3. Change the GPA of a student
- 4. Change the expected grade of a student
- 5. Print the data of all the students in a tabular format
- 6. Quit the program Save all the files that you create in this program with appropriate file names.

## Turn In

All labs will be graded in Blackboard. Once you are done with the lab turn it in to the Lab 9 link. Please read the How To Submit instructions if you have any questions or contact the instructor / academic coach.

For this lab you will turn into Blackboard:

1. The Python code file(s) you saved in the program written above