1. Define the following terms:

- **Procedural Programming**
- **Object-Oriented Programming**
- **Class**
- **Object**
- **State**
- **Method**
- **Constructor**
- **Instantiation**
2. Why would we define a class of our own?

3. What is the syntax for defining a class?

4. What is the syntax for defining a method?

5. What is the keyword `self` refer to? When do we use it?

6. What happens when an object is printed? Can you change this?
7. What is the output of the following code.

class Course:
    def __init__(self, init_dept, init_num, init_prof, init_max):
        self.dept = init_dept
        self.num = init_num
        self.prof = init_prof
        self.max_enroll = init_max
        self.enrolled = 0
    def set_dept(self, dept):
        self.dept = dept
    def set_num(self, num):
        self.num = num
    def set_prof(self, prof):
        self.prof = prof
    def set_max_enroll(self, max_enroll):
        self.max_enroll = max_enroll
    def set_enrolled(self, enrollment):
        self.enrolled = enrollment
    def __str__(self):
        return self.dept + " " + str(self.num) + " - Prof. " + self.prof + " (" + str(self.enrolled) + " of " + str(self.max_enroll) + " students enrolled)"
thiscourse = Course("COSC", 101, "Madeline E. Smith", 24)
thiscourse.set_enrolled(26)
print(thiscourse)

8. Write a new version of the constructor for the Course class to set reasonable default values.
9. Write a new method for the Course class that allows the user to add students to the course.

10. Write new methods for the Course class to "get" the state data.
11. Write a function that allows the user to view the current enrollment for a given Course object and increment as necessary.

12. Write a function that asks the user for input and returns a Course object with the data they provided.