UNIVERSITY OF THE DISTRICT OF COLUMBIA
SCHOOL OF ENGINEERING AND APPLIED SCIENCES

Department of Computer Science and Information Technology
Fall 2020

Course Title: Intro Programming (Python) - APCT 110/111
Instructor: Oladunni, Timothy
Office Location: Bldg. 42, Room 112 E
Class Location: Online
Instructor's Email: Timothy.oladunni@udc.edu
Class Hours: 5:30 pm - 6:20 pm, TR (Lecture)
**   6:30 pm - 7:20 pm TR (Lab)**
Office Hours: 4:30 pm- 5:30 pm TR

1. Course Description

This is a foundational course in computer programming focusing on Python3. Topic include; Variables and Expressions, Types, Branching, Loops, Functions, Strings, List and Dictionary, Classes, Exception, Modules, plotting, Sorting etc.

2. Learning Objective
Students who complete this course should be able to perform the following tasks:
1. Design programs using programming design tools.
2. Understand basic concepts such as data storage, program execution.
3. Demonstrate knowledge of fundamental programming concepts.
4. Understand the concept of object-oriented design.
5. Demonstrate problem-solving skills

3. Course Outcome
Students will be able to:
1. Develop methods and algorithms to solve complex computing problems
2. Design a computing-based solution using appropriate design tools to meet a given set of requirements.
3. Participate as a team member or leader in developing and selecting ideas, establishing team goals and objectives, and creating a collaborative and inclusive environment

4. Course Schedule (Tentative)

Week	Topic	
Week 1	Introduction to Python3	
Week 2	Variables and Expressions	
Week 3	Types	Test 1
Week 4	Branching and Loops	

Week 5		Mid Term
Week 6	Functions	
Week 7	Strings	
Week 8	Lists and Dictionaries	Test 2
Week 9	Classes	
Week 10	Exceptions	Test 3
Week 11	Sorting and Searching Algorithms	
Week 12		Final

5. Evaluation

Final grade will be based on the following:

Test 1 10%

Test 2 10%

Test 3 10%

Activities/Class Work 20%

Attendance 5%

Mid Term 20%

Final 15%

Reflect on your learning experience by providing

 thoughtful feedback on course content and format 10%

The lab section of the zybook will be used for the laboratory requirement of the course.

6. Textbook

Programming in Python 3 with zyLabs

Authors   Bailey Miller / CSE Ph.D., Univ. of California, Riverside / zyBooks (Former software engineer at SpaceX)

To have access to the textbook please do the following:

1. Sign in or create an account at learn.zybooks.com
2. Enter zyBook code: UDCAPCT110OladunniFall2020
3. Subscribe

7. Format and Procedures

This course will employ lectures, exercises, assignments, labs, and examinations. Students are strongly encouraged to participate extensively, ask questions, express ideas and opinions,

and challenge traditional ideas and concepts. Instructional methodologies will emphasize critical thinking, problem solving, and reasoning over simple memorization.

8. Assessment Procedures

All students need to finish any given programming assignments in a timely manner. Assignments, tests, labs, and Final exam will take place to measure their ability of understanding python3 programming.