



SCHOOL OF STEM SYLLABUS



TERM:

COURSE CODE: CSC-118

COURSE TITLE: Python Programming

DAY(S) AND TIME(S):

LOCATION:

INSTRUCTOR:

OFFICE HOURS:

OFFICE LOCATION:

EMAIL:

PHONE:

COURSE PREREQUISITE: MAT-110

CREDITS: 3

COURSE DESCRIPTION:

The course is an introduction to basic principles of programming using Python. Python is an open-source scripting language that allows rapid application development of both large and small software systems. The course introduces students to the fundamentals of data storage, input and output, control structures, functions, sequences and list, dictionary, sets, and file Input/Output. Students learn how to design algorithms, write external and internal documentation and design and write source code in Python.

STUDENT LEARNING OUTCOMES:

Upon completion of this course, students should be able to:

1. Understand and use the basic programming constructs of Python
2. Manipulate various Python datatypes, such as arrays, strings, and pointers
3. Isolate and fix common errors in Python programs
4. Use memory appropriately, including proper allocation/deallocation procedures
5. Apply object-oriented approaches to software problems in Python
6. Write small-scale Python programs using the above skills

TEXTBOOK AND SUPPLEMENTAL MATERIALS:

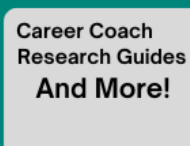
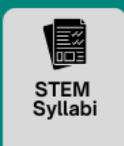
Programming in Python by Toni Gaddis

GRADING POLICY:

<u>Item</u>	<u>Weight</u>
Exams	60%
Programming Projects	40%

STEM STUDENT HUB

Information & Resources tailored towards students taking any STEM courses



SAMPLE COURSE SCHEDULE:

Week 1	Variables and Assignments Input and Output Data Type and Expressions Program Style
Week 2	Predefined Functions Overloading Function Names Void Functions Call by Reference Parameters
Week 3	If-else if-else statements
Week 4	Test 1 Nested if Statement
Week 5	Loops
Week 6	Nested Loops
Week 7	User Defined Function
Week 8	Test 2
Week 9	Function Continues
Week 10	Data Files
Week 11	Test 3
Week 12	List & Tuples
Week 13	List and Tuples Continues
Week 14	Dictionary
Week 15	Test 4

HCCC POLICIES, STATEMENTS, AND SERVICES:

<https://www.hccc.edu/administration/academic-affairs/syllabus-addendum.html>



