

SU DEPARTMENT OF COMPUTER SCIENCE SYLLABUS (Tentative)

COSC 118 Introductory Scientific Programming of Python programs will be the ce

course.(Three hours lecture and two hours lab per week)

Textbook: “Starting Out With Python”, by Tony Gaddis, Pearson, Addison Wesley, 4th Edition.

	Weeks
An Introduction to Computers Introduction to the basic programming concepts.	1.0
Problem Solving Introduction to the software life cycle, program design, and programming tools.	1.0
Fundamentals of Programming Control structures, event-driven programming, numerical calculations, string manipulation, and Output.	1.0
Procedures Functions, parameter passing and Modular Design.	1.0
Branching Conditional operations, If blocks and case structures.	1.0
Repetition Loops and using repetition to process data.	2.0
Arrays and Tuples One-dimensional arrays and tuples.	1.0
Object Oriented Programming Classes and instances	1.0
Py, MatPlotLib, and Modules Introduction to Modern Scientific Python Modules	

Exams/Projects

3.0
14.0