<u>**Course Title**</u> **: Introduction to Python**

<u>**Instructor**</u> **: Sankar Manoj , Rhett D'Souza**

1. Scope and Objective of the course:

This course aims to give students an in-depth understanding of Python, designed to even accommodate students that have no previous programming experience.

2. Course Plan:

SR NO.	WEEK	TOPIC TO BE COVERED	DETAILS
1.	Week 1	Why Python? What is Python? How to use Python? Installing Linux and Python Learning Unix basics	We will examine Python in some detail, with a comparison with other languages, and what the language aims to achieve. We will also look at the programming methodologies that Python emphasises. After this we will install Linux and Python.
2.	Week 2	Variables Structure Syntax	Text Input / Output Creation, assignment of Variables Carrying out operations on variables Blocks and Indentation
3.	Week 3	Data types, Data Structures	Integer, String, Float, etc. List, Tuple, Dictionary,
4	Week 4	**IF / FOR / WHILE** statements **BREAK**	We will teach the three fundamental statements , the different methods of using them. We will also look at nested statements
5	Week 5	Functions and libraries	Usage of existing functions from system libraries, declaration of functions. Importing from other files
6	Week 6	Object Oriented Programming	What is? Classes, Objects, Inheritance

7	Week 7	Classes and Objects	Creation of Classes, creating Objects, referencing
8	Week 8	File Operations	Basic file handling techniques
9	Week 9	Multi-threading	Threads, creation, running.
10	Week 10	Sockets	Network Programming
11	Week 11	Numpy and Scipy Matplotlib	Library for Maths and Science Graphing for Python
12	Week 12	OpenCV	Intro to CV and basic image processing

3. Evaluation Scheme:

Component	Weightage (%)	Tentative Date	Remarks
Assignments	50	Regularly in Class	Based on stuff we discussed in class.
Final Project	50	Before Compre	