

MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF SCIENCE
DEPARTMENT OF COMPUTER SCIENCE

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COURSE CODE: DIT 058 COURSE TITLE: Introduction to Programming

Purpose:

- To appreciate methodology of structured programming
- To appreciate methodology of modular programming.
- To appreciate the concept of data structures.

Objectives:

At the end of this course, the student should be able to:

- ❖ Write programs using control structures
- ❖ Write programs using procedures.

Content:

WEEK 1

Introduction

- High level languages
- Source code
- Object code
- Translators(interpreters and compilers)

WEEK 2

- Algorithms
- Program Elements**
- Preprocessor commands
- **ASSIGNMENT I**

WEEK 3

- Variables and data types
- operators and expressions

WEEK 4

- Statements
- Blocks and comments.
- **CAT1**

WEEK 5

Control structures

- Selection
 - if ,if else, Switch-Case

WEEK 6

- Iteration
 - For, do-while, while loops.

WEEK 7

Basic data Structures

- Introduction to Arrays
- **ASSIGNMENT II**

WEEK 8

- Single dimensional arrays.
- **CAT 2**

WEEK 9

- Multidimensional Arrays.

WEEK 10

Modular programming

- Functions

WEEK 11

- Continuation of functions

WEEK 12

- REVISION OF CATS

The language of choice is C++ programming language.

Assessment:

- Continuous Assessment Test -----20 %
- A mini project /Assignments ----- 20 %
- Written / main Exam.----- 60 %

REFERENCES:

- 1) Harbinson Steele – C++ A reference manual.
- 2) Peter Aitken, Brad L. Jones- Teach yourself C++ in 21 days
- 3) Any other relevant books and relevant materials from the Internet.

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Consultation Time:

Tuesday- 8.00-10.00 Hours & Wednesday – 8.00- 10.00 Hours

Venue- LBB 016