

MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF SCIENCE
DEPARTMENT OF COMPUTER SCIENCE
CSC 110/ BCO 102: FUNDAMENTALS OF COMPUTING

INSTRUCTOR:
Mr. Omieno K.K.
Tel: +254726849197

Mail: komiemo@acm.org Web: www.kelvinomieno.com

PURPOSE:

The course introduces the students to computer use and applications, and help the students to be familiar and computer literate.

OBJECTIVES

By the end of the course, the student should be able to:

- ✓ Explain the characteristics and purposes of all the sub-units in a computer system
- ✓ Categorize the different types of computers
- ✓ Explain the applications of computers to different fields and explain the impacts of computers to the society.
- ✓ Explain the numbers systems ; perform binary arithmetic and the conversions to different basis
- ✓ Demonstrate the use of networks and other data communication facilities.
- ✓ Apply the concepts of operating systems and learn the features of Ms DOS and Windows Operating System.

COURSE CONTENT

Week #2:

Introduction to Computers;

- ✓ Application of Computers
- ✓ Evolution of computers

Week #3:

Introduction to Hardware;

- ✓ Basic Computer organization; I/O, Processor and memory, buses
- ✓ Assignment 1

Week #4:

Data representation and Binary arithmetic

- Binary, Octal, Decimal, Hexadecimal number systems
- ✓ ASCII, EBCDIC, UNICODE

Week #5:

- ✓ Types of Computer systems
- ✓ CAT 1

Week #6:

Introduction to Software

- ✓ Systems software
- Operating system, system utility, device drivers

Week #7:

- ✓ Application software
-Word processors, spreadsheets, databases, presentation
- ✓ Programming languages
- ✓ Assignment 2

Week #8:

Introduction to data communication

- ✓ Data communication elements
- ✓ Types of network topologies

Week #9:

CAT 2

Week #10:

Revision of CATs and Assignments

TEACHING METHODOLOGY

- Lectures
- Discussions
- Case studies
- Assignments

ASSESSMENT

- Assignment and CATS.....30 %
- EXAM70 %

REFERENCE

- Stallings Hutchinson Sawyer: Computers –The user perspective (1988), Times mirror
- Wang, W and Parker R C.(2002) office 2000 for windows, New York, Microsoft
- Relevant internet materials