

MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF SCIENCE
DEPARTMENT OF COMPUTER SCIENCE
COURSE CODE: DIT 063 **COURSE TITLE: Basic Mathematics**

Course content

Week One:

- Quadratic functions and equations:

Week two:

- Graphs of quadratic functions
- Surds

Week Three:

- Surds
- Indices
- **Assignment 1**

Week Four:

- Logarithms
- **CAT1**

Week Five:

- Permutations

Week Six:

- Combinations

Week Seven:

- Series:
- ❖ Arithmetic

Week Eight:

- ❖ Geometric
- ❖ Binomial
- ❖ **ASSIGNMENT 2**

Week Nine:

- Compound interest
- Approximations.

Week Ten:

- Trigonometry
- Trigonometric functions

Week Eleven:

- Trigonometric graphs and inverses in degree and radian measure
- **CAT 2.**

Week Twelve:

- Sine and cosine formulae.
- Addition, multiplication, angle and factor formulae.

Evaluation

1) 2- Continuous Assessment Test -----	20 %
2) Assignment -----	20 %
3) Main Exam -----	60%

References:

1. Larson & Edwards, Calculus *An applied Approach*, 2003
2. Dolciani Brown Cole, Algebra *Structure and Method*, 2000
3. Alice Karseberg, Intermediate Algebra 2nd Edition, 1998.
4. Any other relevant book on calculus.