Course Code: BMGT E1055
Title: Mathematics for Business
Aim: To; (i) develop basic mathematical knowledge of students, (ii) develop students’ analytical and decision making skills with the application of mathematical techniques learnt.

Learning Outcome:
On completion of this course unit, students should be able to:

- Identify the various mathematical methods required in managerial decision making
- Describe and explain the management issues using mathematical techniques
- Demonstrate critical thinking, modeling, and problem solving skills required in the managerial capacity
- Solve problems in business using appropriate mathematical techniques.

Content: Number systems; Real Number Line; Natural Numbers; Even Numbers; Odd Numbers; Prime Numbers; Rational Numbers; Irrational Numbers; Real Numbers. Algebra; Factors, Least Common Multiplier; Highest Common Divisor; Indices; Logarithms Operation of Quotients; Operations of Algebraic Expressions. Equations; Simple Equations; Simultaneous Equations; Quadratic Equations; Problems Leading to Equations. Progressions; Arithmetic Progressions; Geometric Progressions. Mathematics of Finance; Simple Interest; Compound Interest; Discounts; Depreciations; Present Value; Annuities. Analytical Geometry; Distance between points; Equation of a straight line; Graphs of curves; Circle; parabola; Demand, Supply and Revenue Functions. Discrete Mathematics; Sets; Permutations; Combinations; Binomial Theorem. Calculus; Limits; Slope of a curve; Rate of Change; Differentiation; Marginal Cost; Marginal Revenue; Marginal Profit; Integration; Area of a curve. Matrices; Simple matrix; Mathematical operations in Matrices; Type of matrices.
Method of Teaching and Learning:
Lectures, Seminars

Assessment:
Examination, Assignments

Recommended Readings:

