



EDO UNIVERSITY IYAMHO



Department of Economics

ECO 214: Mathematics for Economists 1

Instructor: Mr. Olawale Hezekiah, email: Hezekiah.olaawale@edouniversity.edu.ng

Lectures: Monday, 8am – 10am, LT6, phone: (+234) 8024691100

Office hours: Tuesday, 10.00am to 12.00 PM, Office: MBH 1st Floor Room 7

COURSE CODE ECO 214: Mathematics for Economists 1

1. Real Number System
2. Exponents and Roots
3. Sequences and series
4. Matrix algebra: matrix addition, subtraction and multiplication
5. Transpose of a matrix; Determinants; Matrix inversion; Cramer's Rule and economic applications
6. Partial and total derivatives
7. Maximal and minima
8. Unconstrained and constrained optimization of one variable function
9. Expansions and Taylor's theory

Recommended texts

Chiang A. C. (1967), *Fundamental Methods of Mathematical Economics*, Third Edition, McGraw-Hill Inc

Dowling, E.T. (2001). *Schaum's Outline Series. Introduction to Mathematical Economics*. McGraw-Hill: New York. Third Edition.

Malcolm .P and Nicholas R. (2011), *Mathematics for Economists: An Introductory Textbook*. University of Toronto Press. Canada

Ekanem O.T and Iyoha M.A. (2000), *Mathematical Economics, an Introduction*. Mareh Publishers, Benin City