MATH131 Finite Math with Calculus

This course introduces matrix algebra, inequalities and systems of linear inequalities, linear programming, and basics of differential and integral calculus.

(Pre-requisites: MATH 130)

Course Learning Outcomes:

By the end of the course, students will be able to:

1. Demonstrate generalized knowledge and understanding of the main theories and concepts behind linear inequalities, matrices, linear programming, differentiation, and integration.
2. Apply the theories and concepts of linear inequalities, matrices, linear programming, differentiation, and integration to solve real-life problems.
3. Solve problems of a mathematical nature using linear inequalities, matrices, linear programming, differentiation, and integration.

Textbook & Course Materials:

- Introductory Mathematical Analysis for Business, Economics and Life and Social Sciences, by Ernest F Haeussler (Author), Richard S. Paul (Author), Richard J. Wood (Author), Dr SAADIA KHOUYIBABA (Author), Pearson, Adapted edition (9 August 2012),

Course Content:

1. Linear inequalities
2. Matrix Algebra
3. Linear Programming
4. Limits and Continuity
5. The Derivative
6. Integration

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