

COURSE DETAIL

LINEAR ALGEBRA I

Country

Hong Kong

Host Institution

University of Hong Kong

Program(s)

University of Hong Kong

UCEAP Course Level

Lower Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

21

UCEAP Course Suffix**UCEAP Official Title**

LINEAR ALGEBRA I

UCEAP Transcript Title

LINEAR ALGEBRA I

UCEAP Quarter Units

5.00

UCEAP Semester Units

3.30

Course Description

This course introduces the theory and techniques of linear algebra through many concrete examples in the Euclidean spaces. Topics include vector geometry in \mathbb{R}^2 and \mathbb{R}^3 , systems of linear equations, row equivalence of matrices, matrix algebra, determinant and rank of matrices, vector spaces, subspaces, basis and dimension, linear transformation, change of bases and diagonalization of matrices, eigenvalue problem, and inner product. Text: W. K. Nicholson, LINEAR ALGEBRA WITH APPLICATIONS. Assessment: exam (50%), test (40%), assignments (10%).

Language(s) of Instruction

English

Host Institution Course Number

MATH2101

Host Institution Course Title

LINEAR ALGEBRA I

Host Institution Course Details

Host Institution Campus

University of Hong Kong

Host Institution Faculty

Host Institution Degree

Host Institution Department

Mathematics

Course Last Reviewed

2023-2024

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