

COURSE DETAIL

FUNDAMENTAL CONCEPTS OF MATHEMATICS

Country

Hong Kong

Host Institution

University of Hong Kong

Program(s)

University of Hong Kong

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

112

UCEAP Course Suffix**UCEAP Official Title**

FUNDAMENTAL CONCEPTS OF MATHEMATICS

UCEAP Transcript Title

CONCEPTS OF MATH

UCEAP Quarter Units

5.00

UCEAP Semester Units

3.30

Course Description

This course introduces the fundamental concepts of mathematics and methods of mathematical proofs. Such concepts and methods are important for subsequent studies in all higher level courses in mathematics. Course topics include: elementary set theory; statement calculus; mathematical proofs; relations and functions; finite and infinite sets; natural numbers and mathematical induction; axiomatic systems in mathematics; real numbers and the limit of a sequence; examples of groups. Prerequisite: Pass in MATH1013 University mathematics II or MATH1851 Calculus and ordinary differential equations and MATH1853 Linear algebra, probability and statistics.

Language(s) of Instruction

English

Host Institution Course Number

MATH2012

Host Institution Course Title

FUNDAMENTAL CONCEPTS OF MATHEMATICS

Host Institution Campus**Host Institution Faculty****Host Institution Degree****Host Institution Department**

Mathematics

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