

# 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 Course Details****Host Institution Campus****Host Institution Faculty****Host Institution Degree****Host Institution Department**

Mathematics

**Course Last Reviewed**

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