

COURSE DETAIL

MATHEMATICAL ANALYSIS I

Country

Singapore

Host Institution

National University of Singapore

Program(s)

National University of Singapore

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

114

UCEAP Course Suffix

A

UCEAP Official Title

MATHEMATICAL ANALYSIS I

UCEAP Transcript Title

MATH ANALYSIS I

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

The course covers the concepts and methods of mathematical language. The focus is more on the analytic and topological notions such as convergence and continuity, which are essential for a rigorous treatment of mathematical analysis. The ability to read and write mathematical proofs is also further developed in this module. Topics include real numbers, sequences and series of real numbers, metrics in Euclidean spaces, open and closed sets, continuous functions, compact sets, connected sets, sequences of functions. Major applications include intermediate value theorem, extreme value theorem.

Language(s) of Instruction

English

Host Institution Course Number

MA2108

Host Institution Course Title

MATHEMATICAL ANALYSIS I

Host Institution Course Details

<https://nusmods.com/courses/MA2108/mathematical-analysis-i>

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Mathematics

Course Last Reviewed

2022-2023

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