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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