COURSE DETAIL

CALCULUS
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 131
UCEAP Course Suffix
UCEAP Official Title CALCULUS
UCEAP Transcript Title CALCULUS
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description

This is a course in single-variable calculus. It introduces precise definitions of limit, continuity, derivative, and the Riemann integral. It covers computational techniques and applications of differentiation and integration. This course concludes with an introduction to first order differential equations. Major topics include functions; limit and continuity; derivative; Intermediate Value Theorem; chain rule; implicit differentiation; higher derivatives; Mean Value Theorem; Riemann integral; Fundamental Theorem of Calculus; elementary transcendental functions and their inverses; techniques of integration; computation of area, volume and arc length using definite integrals; and first order differential equations.

Language(s) of Instruction
English

Host Institution Course Number
MA2002

Host Institution Course Title
CALCULUS

Host Institution Course Details
https://nusmods.com/courses/MA2002/calculus

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Mathematics

Course Last Reviewed

2023-2024

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