

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

185

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 Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Mathematics

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