COURSE DETAIL

COMPLEX VARIABLES WITH APPLICATIONS
Country Hong Kong
Host Institution Chinese University of Hong Kong
Program(s) Chinese University of Hong Kong
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Mathematics
UCEAP Course Number 112
UCEAP Course Suffix
UCEAP Official Title COMPLEX VARIABLES WITH APPLICATIONS
UCEAP Transcript Title COMPLEX VARIABLES
UCEAP Quarter Units 4.50
UCEAP Semester Units 3.00

Course Description
This course introduces the basic properties of complex functions and analytic functions and illustrates the important use of these theories to other branches of mathematics and sciences. Topics include: complex numbers; limits, continuity and derivatives, Cauchy-Riemann equations, analytic functions; elementary functions; mapping by elementary functions; Contours integrals, Cauchy-Goursat theorem, Cauchy integral formula, Morera's theorem, maximum moduli of functions, the fundamental theorem of algebra; Taylor series and Laurent's series; residues and poles, evaluation of infinite real integrals.

Language(s) of Instruction
English

Host Institution Course Number
MATH2230

Host Institution Course Title
COMPLEX VARIABLES WITH APPLICATIONS

Host Institution Course Details

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Mathematics

Course Last Reviewed

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