COURSE DETAIL

PROBABILITY AND STATISTICS I

Country
Hong Kong

Host Institution
University of Hong Kong

Program(s)
University of Hong Kong

UCEAP Course Level
Lower Division

UCEAP Subject Area(s)
Statistics

UCEAP Course Number
31

UCEAP Course Suffix
A

UCEAP Official Title
PROBABILITY AND STATISTICS I

UCEAP Transcript Title
STATISTICAL METHODS

UCEAP Quarter Units
5.00

UCEAP Semester Units

3.30

Course Description
The discipline of statistics is concerned with situations in which uncertainty and variability play an essential role and forms an important descriptive and analytical tool in many practical problems. Against a background of motivating problems, this course develops relevant probability models for the description of such uncertainty and variability. Topics: sample spaces; operations of events; probability and probability laws; conditional probability; independence; discrete random variables; cumulative distribution function; probability mass function; Bernoulli, binomial, geometric, and Poisson distributions; continuous random variables; probability density function; exponential, gamma, and normal distributions; functions of a random variable; joint distributions; marginal distributions; independent random variables; functions of jointly distributed random variables; expected value; variance and standard deviation; covariance and correlation.

Language(s) of Instruction
English

Host Institution Course Number
STAT2601

Host Institution Course Title
PROBABILITY AND STATISTICS I

Host Institution Course Details

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Statistics & Actuarial Science

Course Last Reviewed

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