

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

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 Campus**Host Institution Faculty****Host Institution Degree****Host Institution Department**

Statistics & Actuarial Science

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