

COURSE DETAIL

PROBABILITY FOR STATISTICS

Country

Host Institution

Program(s)

University of Melbourne

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

124

UCEAP Course Suffix

UCEAP Official Title

PROBABILITY FOR STATISTICS

UCEAP Transcript Title

PROBABLYTY FOR STATS

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course develops the probability theory that is necessary to understand statistical inference. Topics: Properties of probability; random variables are and their properties are developed and illustrated through common univariate probability models; models for the joint behavior of random variables along with conditional probability and Markov chains; methods for obtaining the distributions of functions of random variables along with techniques to obtain the exact and approximate distributions of sums of random variables. These methods are illustrated through some well known normal approximations to discrete distributions and by obtaining the exact and approximate distributions of some commonly used statistics. Computer packages are used for numerical and theoretical calculations but programming skills are not required.

Language(s) of Instruction

English

Host Institution Course Number

MAST20006

Host Institution Course Title

PROBABILITY FOR STATISTICS

Host Institution Campus

Parkville

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

Mathematics and Statistics

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