

PHDC6105 : Statistical Methods in Psychology (Data Analysis with R)

This course consists of two parts. First, this course introduces key concepts and principles of statistics for psychological research, including basic and advanced statistical methods, ranging from descriptive statistics, chi-square test, correlation, and t-test, a series of analysis of variance (ANOVA) methods (e.g., ANOVA theory, one-way ANOVA, factorial ANOVA, ANCOVA, repeated measures ANOVA, and mixed ANOVA), and various regression models. Second, this course will also focus on the development of students' analytic skills with R programming language, with which students will learn basic data management and visualization skills, and how to implement the learned statistical methods and models in R. All students are expected to be able to perform all the analyses in R.

Credits 3