

3. Analysis of Variance

One- and two-way analysis of variance, the analysis table and related tests, fixed and random effects, multiple comparison procedures and contrasts.

4. Multiple Regression Analysis

Using more than one independent variable, graphical considerations for this problem, assumptions, collinearity, estimation of the best regression equation, analysis of variance table, overall and partial F tests.

5. The General Linear Model

Multiple Regression and analysis of variance as special cases of the general linear model. The general procedure for constructing F-tests by fitting restricted models. Applications to analysis of covariance and comparison of two regression model.

6. Correlations: Multiple, Partial and Multiple-Partial